

ECONOMIC HISTORY

(A SUPPLEMENT TO THE ECONOMIC JOURNAL)

VOLUME I



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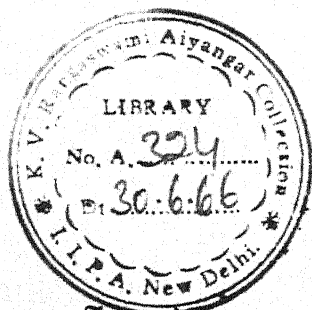
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ARTICLES (*continued*) :—

	PAGE
Holtrop, M. W., Theories of the Velocity of Circulation of Money in Earlier Economic Literature	503
Jones, E. J., "Scotch Cattle" and Early Trade Unionism in Wales ...	385
Lloyd, William Forster, "The Notion of Value," 1833 (<i>Reprinted</i>) ...	168
Marshall, T. H., The Population Problem during the Industrial Revolution	429
Muntz, Prof. E. E., The Early Development of Economic Concepts ...	1
Nolan, Dom Patrick, A 14th Century Treatise on Money	34
Norman, F. A., and Lee, L. G., Labour Exchanges in the 17th Century	399
O'Brien, George, The Irish Staple Organisations in the Reign of James I	42
O'Brien, George, The Last Years of the Irish Currency	249
Page, F. M., "Bidentes Hoylandie," A Mediæval Sheep Farm... ..	603
Plummer, A., The General Strike during One Hundred Years	184
Richards, R. D., A Pre-Bank of England English Banker—Edward Backwell	335
Richards, R. D., The Pioneers of Banking in England	485
Rive, Alfred, The Consumption of Tobacco since 1600	57
Rive, Alfred, A Short History of Tobacco Smuggling	554
Venn, J. A., The Economy of a Norfolk Parish in 1783 and at the Present Time	76

REVIEW :—

Frank, Tenney, <i>An Economic History of Rome</i> . By W. E. Heitland...	284
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THE ECONOMIC JOURNAL

(ECONOMIC HISTORY SERIES No. 1)

JANUARY, 1926

THE EARLY DEVELOPMENT OF ECONOMIC CONCEPTS

It is the fashion to-day for teachers of elementary economics to plunge the student at once into the maelstrom of our modern economic organisation, an intricate product of the cumulative civilisation of ages. The student is expected to disentangle economic theory from what appears to him a mass of totally unrelated facts. In his mind economic laws loom up almost unconsciously as recent inventions or new discoveries. Little regard, if any, is given to the fact that in the background of fundamental economic concepts there lies a long historical evolution. Conceding that it is easier to comprehend a problem by proceeding from the simple to the complex, it would appear that a little consideration given to the gradual unfolding of economic concepts in the minds of primitive races would afford a perspective of incalculable worth to the student. This fact was recognised years ago by Professor Carl Bücher in his valuable work *Die Entstehung der Volkswirtschaft*, in which he devoted the early chapters to the economic life of primitive peoples.

It is the purpose of this article to supplement Bücher's account of the economic life of primitive races with ethnological data concerning the development of economic concepts in the minds of the backward races of to-day, especially under conditions of contact with advanced societies. Of the primitive peoples extant at the present time the greatest number and the most divergent degrees of native culture are to be found in Africa, which thus furnishes an excellent example for such a study as we now have under consideration.

The vast majority of the native tribes of Africa were well acquainted with trade in some manner or other. Natural conditions fostered inter-communication. The vast extent of the Black Continent and the gradations of climate and temperature produced a wide variety of natural products, some peculiar to the

tropics, others to the temperate zone. Moreover, innumerable opportunities were offered to the African races for indigenous culture and inter-group specialisation. Thus some tribes were specialised in the manufacture of cotton goods, others in iron-work; some societies were primarily agricultural, others pastoral, and in the forest many groups were to be found in the most primitive hunting stage. With these facts in mind we can expect to find trade and commerce in various phases of evolution at the time of the earliest contact with the Caucasian races.

There are but few cases of African tribes which appeared totally unused to barter or exchange at the time of the white man's arrival. It seems that the Bushmen had little or no notion of commercial exchange; the idea appeared absurd to them. The Hottentots, though farther advanced in most ways, were on the same plane as the Bushman with respect to exchange. But once the concept had been gained, they quickly adapted themselves to it. Furthermore, the Hottentots were not devoid of resources for developing trade; they had their flocks and herds; they knew how to prepare and preserve the hides, manufacture pottery, forge iron and even shape and polish bracelets made of ivory. Even when, however, the benefits of trade are patent to the aborigines they seem unable to take advantage of the situation and to provide themselves with sufficient quantities of their own native products which may be had with a little exertion in order to build up a profitable trade. Their lack of foresight tends to put them in a disadvantageous position when dealing with foreign peoples, and not having the necessary price good, they tend to appropriate from the whites whatever they can.¹

The most primitive form of peaceful exchange was that by means of reciprocal gifts. It has become a customary mode of trade among many of the native races of Africa. Thus Mungo Park writes: "Presented Mansa Kussan [the chief man of Julifunda] with some amber, coral, and scarlet with which he appeared to be perfectly satisfied, and sent a bullock in return."² Whether or not exchange by mutual gifts arose out of efforts to propitiate, as Spencer alleges, the fact remains that the responsive present should have a value approximately equal to the original one; there existed a crude valuation process in the minds of the aborigines. The Bihénos refused to sell anything to the European, but according to custom made a present of it, and in return extorted as much as they could until European travellers found

¹ Letourneau, *L'évolution du commerce*, pp. 39-41.

² Mungo Park, *A Journal of a Mission to the Interior of Africa*, pp. 160-1.

it necessary to refuse all presents.¹ In the countries of the Sudan the constant giving of presents as a means of trade had become so well established that the natives declined to deal with the whites in any other manner; the donors soon learning that a departure from their old custom of gifts to one of direct barter was not profitable, owing to the liberality of the European in the first case.²

Dumb barter or silent trade represents a step beyond the mutual exchange of gifts in that there is an evaluation by the traders on both sides. Further, it is a trading relationship which first arises with members of the "out-group." It is the most primitive type of foreign trade as concerns the tribe or clan, and usually occurs where one of the parties represents a relatively high, and the other a relatively low type of culture. It has been suggested that this is a method adopted by travellers belonging to civilised peoples to open commercial relations with savages who shun their approach.³ It is probable that silent trade with the members of outside groups arose "from a sense of personal insecurity, and has fetish in it, the natives holding it safer to leave so dangerous a thing as trafficking with unknown beings—white things that were most likely spirits, with the smell of death upon them—in the hands of their gods."⁴ Claude Jannequin, *Sieur de Rochfort*, quoted by Miss Kingsley, describes the system of dumb barter in West Africa in 1639 :

" ' In this cursed country there is no provision but fish dried in the sun, and maize and tobacco.' The natives will only trade by the French laying down on the ground what they would give for the provisions, and then going away, on which the natives came and took the commodities and left the fish in exchange." ⁵

The pigmy race of the Batuas or Akkas, living on the stage of the lower nomads, carried on all their exchanges with outsiders by means of dumb barter.⁶ Silent trade was found to exist in many parts of Guinea, especially in regions well away from Europeanised settlements. That the natives had some concept of the value of the goods offered for sale is evident from the fact

¹ H. Capello and K. Ivens, *From Benguela to the Territory of Yacca*, I, 116.

² Staudinger, *Im Herzen d. Haussaländer*, 2nd ed., pp. 216-7 (quotation).

³ P. J. H. Grierson, *The Silent Trade*, p. 63.

⁴ Mary H. Kingsley, *West African Studies*, p. 249.

⁵ *Ibid.*, p. 248.

⁶ W. Junker, *Travels in Africa*, III, 85-6.

that against each class of articles so many cowrie shells or beans were placed, thus indicating the price.¹

Wholesale and retail trade carried on for profit by the native races is largely a product of contact with civilised nations. The vague ideas of property rights in the individual, coupled with the usual tenets of tribal property, served to hold back the development of such professions. Bücher says :

“ Trade in the sense in which it is regarded by national economy—that is, in the sense of the systematic purchase of wares with the one object of a profitable re-sale as an organised vocation—can nowhere be discovered among primitive peoples. Where we meet native traders in Africa, it is a question either of intermediary activity prompted by European and barbarian merchants, or of occurrence peculiar to the semi-civilisation of the Soudan. Otherwise the only exchange known to the natives everywhere is exchange from tribe to tribe. This is due to the unequal distribution of the gifts of Nature and to the varying development of industrial technique among the different tribes.”²

That exchange from tribe to tribe took place is evident from the fact that English wares deposited at Mombas, on the eastern side of South Africa, have been recognised at Mogador, on the west coast of Northern Africa.³

Regardless of the fact that there existed indigenous products of such a nature that they formed a natural basis of trade, commerce in the modern economic sense scarcely existed before contact with advanced races. This is because such multifarious products as had become the backbone of trade among Europeans had little or no use in the primitive economy. The native races in their primitive condition are influenced by few needs, that is, those things which are requisite for maintenance on the standard of living, if we may term it such, to which they are accustomed. Trade does not supply those needs, because the materials for native existence are ready at hand in the vegetable and animal life of the forest and plain. Not until the needs of the native have been multiplied and made more complex by the spread of civilisation will the trader be able to undertake the beneficent rôle of supplying needs as distinct from wants, which we may take to

¹ Mary H. Kingsley, *West African Studies*, p. 248. Miss Kingsley gives a number of additional examples of silent trade occurring in West Africa, pp. 241-7.

² Carl Bücher, *Industrial Evolution*, p. 60.

³ Th. Waitz, *Anthropologie*, II, 101.

represent desires for things in no wise essential to the prevailing life standards of the aborigines. Wants develop trade with savages—not needs. Wants have to be created by the traders or companies in order to persuade the natives to bring down the natural products of the country to the coast. Existing wants have to be quickened. Thus the native peoples wanted firearms in order to slay more quickly, and to enslave each other. They wanted distilled spirits because European alcohol gratified their love of strong drink more fully than native liquor.¹ Miss Kingsley strikes the same keynote when she speaks of West Africa.

“ There is not a single thing Europe can sell to the natives that is of the nature of a true necessity, a thing the natives must have or starve. There is but one thing that even approaches in the West African markets to what wheat is in our own—that thing is tobacco.”²

Where needs are few and well supplied by Nature, and where contact is unable to beget new wants owing to the extreme conservatism or to the aloofness of some tribes, particularly nomads, trade develops very slowly. The first Europeans found but few spurs to trade and intercourse among the Hottentots. They had regard for cattle, sheep and ivory only—occasionally parting with cattle for the tobacco of the Dutch and English, and sometimes disposing of ivory which they had collected.³ The natives of the German colonies did not present a profitable market for the Teuton's wares. The native peoples either had little to give in exchange for European goods, or their needs were so few and their improvidence so great that they did not take advantage of the resources at hand. The Herero clung to their one form of wealth, cattle, with religious zeal, and would never part with an animal unless it was old, sick or bewitched. Cattle had greater attractions for them than the lure of German trade goods. Contact with the whites did develop a few wants, powder, guns and alcohol, a demand which the Government was unwilling to supply.⁴

With the Africans, as with all primitive peoples, the trade goods which had the readiest market were those that appealed to the vanity of the person. Thus beads, blankets, red caps, blue and red coral, gloves and the like usually commanded a ready sale. That the Arab and the white trader took every advantage of the

¹ A. J. MacDonald, *Trade, Politics and Christianity in Africa and the East*, pp. 4, 5, 6.

² Mary H. Kingsley, *West African Studies*, p. 339.

³ F. Ratzel, *Völkerkunde*, I, 703.

⁴ A. G. Keller, *Colonization*, p. 568.

ignorant savage in bartering trinkets and trifles for valuable commodities is so well known that it would be useless to cite examples. The fact is that as long as the savage can be kept in ignorance as to the foreign trader's valuation of native commodities, as long as the trader can maintain a seller's market in which the natives are bidding for his trade goods, and as long as other dealers are kept out of the field, so long will the aborigines exchange goods of great value for worthless baubles. However, as soon as competition arises on the part of white or Arab traders, and the quantity of trade goods increases, the transactions lose their one-sidedness and unfair appearance,¹ as is evident from Barbot's remark on the Gold Coast trade :

“The blacks, having traded with Europeans ever since the fourteenth century, are very well skilled in the proper qualities of all European wares and merchandise vended there; but in a more particular manner since they have so often been imposed on by the European, who in former ages made no scruple to cheat them in the quality, weight and measures of their goods, which at first they received upon content, because they say it would never enter into their thoughts that white men were so base as to abuse their credulity. . . . But now they are perpetually on their guard in that particular, examine and search very narrowly all our merchandise, piece by piece, to see each the quality and measure contracted for by samples; for instance, if the cloth is well made and strong—if the knives be not rusty—if the basons, kettles and other utensils of brass and pewter are not cracked or otherwise faulty, or strong enough at the bottom. . . . Taste and prove brandy, rum or other liquors, and will presently discover whether it is not adulterated with fresh or salt water or any other mixture.”²

The savage's understanding of elementary economic principles is very limited. The ivory market in the Congo illustrates this fact very well. During the war there was very little demand for ivory because it was a luxury. With peace came a big demand, the price soaring to more than 200 francs a kilo, whereas the ordinary price is about forty. For a few months this condition lasted, then came the inevitable reaction, and with it a unique situation.

¹ W. S. Lindsay, *History of Merchant Shipping and Ancient Commerce*, I, 23.

² Quoted by Mary H. Kingsley, *West African Studies*, pp. 622-3.

"In their mad desire to corral ivory the traders ran up the normal price that the native hunters received. The moment the boom burst the white buyers sought to regulate their purchases accordingly. The native, however, knows nothing about the law of demand and supply and he holds out for the boom price. The outcome is that hundreds of tons of ivory are piled up in the villages, and no power on earth can convince the savage that there is such a thing as the ebb and flow of price."¹

Place value is no more readily understood by the African than time value. Thus the natives in the neighbourhood of Blantyre Mission demanded the same price in the interior that they were accustomed to receiving at the coast. They would rather transport all their goods to the coast stations than sell it for a trifle less and be spared the burden of carrying it great distances.²

"A thing that the ordinary native cannot understand is that the farther you go inland, the dearer will be the articles imported, such as calico, etc. I have often heard natives complain bitterly that the shops of Nairobi are more expensive than those of Mombasa, and those of Entebbe than Nairobi, and so on.

"Commenting on this to a shrewd trader in Nyasaland, he said that natives often complained to him that they could get calico at 4*d.* a yard at Blantyre, about five days' distance, whereas he charged them 5*d.* To have said, 'All right, you go down to Blantyre and buy your calico,' would not have convinced the native at all that it was not an exorbitant charge. He would think nothing of going down ten days to expend 8*d.* on two yards of calico. Time is not money to the African.

"'But lor' bless 'ee,' said the trader, 'there are always means of explaining to the native. I say, All right, you go and hunk me up a load of calico from Blantyre for nothing, and I will then sell you as many yards as you like for 4*d.*' This argument was self-convincing."³

In course of time, however, some blacks come to recognise the difference in value of commodities according to place. The Congo River native is perhaps the shrewdest in all Central Africa,

¹ Isaac F. Marcossen, *An African Adventure*, p. 180.

² Duff MacDonald, *Africana*, II, 144.

³ C. H. Stigand, *Hunting the Elephant in Africa*, pp. 280-1.

and knows very well indeed that some commodities can be procured for little or nothing where plentiful, and disposed of for a considerable profit at population centres. That explains why the Bangalas take positions as firemen and wood-boys on the river boats; they want to go into business. They acquire considerable stores of food, palm oil and dried fish at the various stops made by the steamers while in the interior, and dispose of it with great gain at the end of the journey.¹

Mungo Park observed that some of the negro peoples whom he visited could not understand the eagerness of the Europeans for ivory. Shown ivory handles on knives, combs, toys and the like, they could see that the handles were of ivory; but why build ships and undertake voyages to procure an article which had no other value than for furnishing handles to knives and other objects when wood would answer the purpose equally well? They were quite convinced that ivory was used for some secret or magic processes which were concealed from them lest the price of ivory should go up.²

Although exchange by means of reciprocal gifts still persisted in parts of Africa, most of the tribes at the time of early contact with the European races appeared to be on the stage of a barter economy. Books of travel in Africa abound with illustrations of the difficulties to be met with where no medium of exchange exists. In Kukawa,

“A small farmer who brings his corn to the Monday market . . . will on no account take his payment in shells, and will rarely accept of a dollar; the person therefore who wishes to buy corn, if he has only dollars, must first exchange a dollar for shells, or rather buy shells; then with the shells he must buy a *Kūlgu* or shirt; and after a good deal of bartering he may succeed in buying the corn.”³

Cameron experienced the same difficulties at Kawele, where he desired to hire a canoe and the owner wished to be paid in ivory:

“I had none,” he says, “but I found that Mohammed ibn Salib had ivory, and wanted cloth. Still, as I had no cloth, this did not assist me greatly until I heard that Mohammed ibn Gharib had cloth and wanted wire. This I fortunately possessed. So I gave Mohammed ibn Gharib the requi-

¹ Isaac F. Marcossen, *An African Adventure*, pp. 196-7.

² Mungo Park, *Travels*, pp. 456-7.

³ H. Barth, *Travels and Discoveries in North and Central Africa*, II, 55-6.

site amount in wire, upon which he handed over cloth to Mohammed ibn Salib, who in return gave Syde ibn Habib's agent the wished-for ivory, then he allowed me to have the boat." ¹

Certain tribes seemed to have passed beyond the crude stage of barter and to have adopted a common medium of exchange which served within the tribe, sometimes within a larger radius. Salt in bars of definite size constituted money on the West Coast of Africa; ² rock-salt cut into bars of eight or nine inches in length and an inch thick, taken from a deposit in the Quissama country, served the same purpose not only on the river but far in the interior. ³ The Latoukas preferred salt currency. So common was salt as a means of exchange in Africa that the expression, "a salt-eater," was used to designate a rich man. ⁴ Letourneau compares salt to our gold coin, and the cowrie shell, used so much as a medium of exchange to our subsidiary coinage. ⁵

In spite of the fact that we can point to numerous commodities used as money, there is no evidence of any African people, in the absence of European influence, attaining to a currency or legal medium of payment for obligations of every kind and extent. It is rather the rule that the various species of money remain in concurrent circulation, and often obligations can be paid only in certain kinds. ⁶

Park describes the influence of European contact in developing a common medium of exchange in Gambia.

"In their early intercourse with Europeans the article that attracted the most notice was iron. Its utility in forming the instruments of war and husbandry made it preferable to all others; and iron soon became the measure by which the value of all other commodities was ascertained. Thus a certain quantity of goods of whatever denomination appearing to be equal in value to a bar of iron, constituted in the trader's phraseology a bar of that particular merchandise."

Thus a bar of tobacco was twenty leaves, a bar of rum, one gallon of spirits. The English for their own convenience in course of time fixed a bar at two shillings sterling. ⁷ The bar thus became

¹ V. L. Cameron, *Across Africa*, p. 177.

² Lippert, *Kulturgeschichte der Menschheit*, I, 620.

³ J. J. Monteiro, *Angola and the River Congo*, pp. 247-8.

⁴ From *Annales de la propagation de la foi*, 1888.

⁵ Ch. Letourneau, *L'évolution de la propriété*, pp. 468-9.

⁶ Carl Bücher, *Industrial Evolution*, p. 69.

⁷ Mungo Park, *Travels*, p. 39.

an imaginary circulating medium for both English and natives, but the price of any commodity in bars might vary upon different parts of the coast.¹

In much the same way the "peça" or "long" was adopted as the unit of exchange between the river Congo and Ambriz. All produce except ivory was purchased or sold by this unit: for instance, six yards of the ordinary kinds of cotton cloth, such as unbleached calico, blue prints, cotton checks, were equal to a "long"; a yard and a half of blue or baize, five bottles of rum, five brass rods, one cotton umbrella, 3000 blue glass beads, three, six, eight, or twelve cotton handkerchiefs, according to size and quality, were severally equal to a "long"; while articles of greater value, such as kegs of powder, guns, and knives, were equivalent to two or more "longs" each.²

It is apparent from the above examples that commercial contact of native peoples with members of advanced races soon results in the adoption of some highly desired article as a medium of exchange and a measure of value, and that even where such an article no longer holds the popular esteem, the monetary system evolved therefrom tends to continue. The clumsiness and the handicaps of exchange by gift and barter become evident, and the advantages of a common denominator to express values is not lost upon the native mind. The tests are immediate, and the savage does not show his traditional conservatism in resisting an innovation which proves of such great help in satisfying his wants.

Another practice which owed its development more or less to the commercial contact of civilised traders and travellers with the blacks was the establishment of a system of public revenue which was based upon the chief's or in some cases the tribal right to interfere with goods or persons passing through native territory. This right or prerogative undoubtedly originated, as Spencer suggests, in the making of propitiatory gifts to the chief as an acknowledgment of inferiority. It was tribute exacted at infrequent intervals. In course of time the chief came to look upon tribute or propitiatory presents as his due, and where power was not lacking he did not hesitate to enforce the collection of his claims. This would naturally occur when the subject is at the native chief's mercy, either because he is exposing commodities for sale where they can readily be found and a share taken, or he is transferring them from one part of the territory to another

¹ John Howison, *Views of the Colonies*, I, 122.

² J. J. Monteiro, *Angola and the River Congo*, pp. 59-60.

and can easily be stopped and a portion seized, or where the merchant is bringing goods into the territory and it is not difficult for the chief to lay hands upon such merchandise.¹

Before contact with the advanced races, commerce carried on by individual traders was relatively rare. There was rather an exchange of specialties group-wise. With the coming of the Arab and the white man conditions changed, for now the traders did not represent a neighbouring tribe of equal power, but straggling parties of whites or Arabs who were completely in the chief's power. Gifts offered to gain the chief's goodwill and to prevent complete confiscation of goods became the rule.² Thus we have a tariff or customs evolving as a consequence of contact.³ The Bari tribe, whenever opportunity presented itself, demanded beads or other goods of traders' parties as a tax for the right of passing through the country.⁴ The order of questions asked by the Zulu chief Dingaan to the missionary or trader was usually: first as to his health, then as to his purpose in travelling in those regions, and finally, what gifts he brought.⁵ Baker was forced to pay tribute or tax to Legge, the chief of Ellyria, for passing through his country. The chief inspected the traveller's luggage and then demanded fifteen heavy copper bracelets and a large quantity of beads.⁶ It was the custom of the Masai to exact "hongo" or tribute from any person passing through their territory, the amount being assessed by themselves. This tax was supposed to ensure the payer from molestation by the Masai either within or without their territory.⁷

In some regions favourably situated the native princes were every ready to invent pretexts for increasing the tariffs or customs levied by them. Sometimes, if their demands were not complied with, they would shut up the passes of the country and altogether prevent any traffic with the interior, a measure which, if long persisted in, generally proved ruinous to the factories on the coast. Frequently, when this newly-found revenue proved inadequate, chiefs would purposely foment quarrels with European residents for the sole purpose of forcing them to purchase a reconciliation by presents, especially if a number of foreign nations possessed establishments in their country; in this case they would be

¹ H. Spencer, *Principles of Sociology*, II, 564-6.

² C. Bücher, *Industrial Evolution*, pp. 79-80.

³ Ch. Letourneau, *L'évolution du commerce*, p. 84.

⁴ S. W. Baker, *The Albert Nyanza or the Great Basin of the Nile*, pp. 63-4.

⁵ F. Ratzel, *Völkerkunde*, II, 119.

⁶ S. W. Baker, *The Albert Nyanza*, pp. 119-20.

⁷ H. A. Wilson, *A British Borderland*, pp. 262-3.

encouraged to act in this manner, for if they quarrelled with one they had no difficulty in opening a trade with the neighbour on equally advantageous terms.¹

Livingstone gives us a different angle on the development of customs and fines for passage. He points out that in many regions the aborigines were unacquainted with any traders other than those engaged in purchasing slaves, and that the traders were always at the mercy of the chiefs through whose country they were passing. The chief, if he desired, could give asylum to the captive slaves and strip the traders of their property. Consequently, the latter were obliged to curry favour with the chiefs and purchase a safe-conduct from them, and this became customary. Livingstone further shows the connection between the slave trade and fines for passage when he points out that in regions exempt from the slave trade the aborigines never thought of demanding fees for merely passing through the country; they claimed no ownership in land not needed for pasturage or tillage.²

Thus we find contact with the white races has been largely responsible for the development of modern commercial practices among the natives of Africa. Commerce, in our sense of the word, scarcely existed before the coming of the white man. Practically all the native tribes were acquainted with trade in some form or other, but the methods of exchange were of the most elementary form. Commercial intercourse has tended to sharpen the native concept of value. Thus among those peoples not coming in frequent contact with Europeans and Arabs, differences in place or of time do not seem to affect the valuation which they place upon their products; they will ask the same price when the market is glutted as prevailed when there was great scarcity, and they will travel long distances at considerable cost of time and energy to save a small sum on their purchases.

Furthermore, contact with races of a superior culture introduced the native African to the need, and to the advantages, of a money economy as a medium of exchange and a measure of value. Likewise, the presence of isolated Arab and European traders, more or less at the mercy of African chieftains, offered special opportunities to crystallise the idea of customs on goods and fines for right of passage as a means of public revenue for the chief or tribe.

E. E. MUNTZ

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¹ John Howison, *Views of the Colonies*, I, 110-11.

² D. Livingstone, *Travels and Researches in Africa*, pp. 379-80.

SOME FEATURES OF PRIMITIVE INDUSTRY¹

It is often imagined that in the life of savage people there are no economic facts worthy of study. Native industry, however attractive to the anthropologist by reason of its primitive technical processes, has been regarded as achieving its ends by such simple organisation that it really offers no field of research to the economist. But the economic adjustment of the native to his surroundings is a complex matter, and an intricate cultural mechanism is required to obtain the satisfaction of even the most primary of material wants. What follows is an outline of a few of the salient features of Maori industry, indicating some of the factors by which work is controlled, as well as the influence of magical beliefs, the idea of duty to the community, and the amount of care and discrimination exercised by the native in providing for his future needs. The concrete information here embodied as a basis for the theoretical conclusions has been largely drawn from the general ethnographical writings of such authorities as Colenso, Gudgeon and Best, but part has been personally collected from Maori informants.

The Maori of New Zealand worked in what may be called a village economy. All members of the village group, who in general were related by kinship ties of common descent, and were members of the same sub-tribe (*hapū*), co-operated in the labour necessary for the satisfaction of their wants. Division of labour obtained to a limited extent. The tasks of men and women were differentiated, but there was not much specialisation in individual employments. Nearly every man was a fisherman, a fowler, a tiller of the soil, a collector of forest foods, a maker of tools, weapons, nets, cordage and ornaments, something of a builder, and probably a carver in wood and bone as well. Naturally, however, he often had a preference for one of these, and made himself particularly expert at it, though still continuing to practise all the others. In such a state of society exchange

¹ This paper embodies a few preliminary results of research-work in primitive economics, conducted at the London School of Economics and Political Science (University of London).

played no large part in the economic scheme. Certain real specialists, such as the tattooer, the carver, or the *tohunga* (priestly adept), did receive remuneration of food, garments, or ornaments in return for the exercise of their skill, but such was always made in the form of a gift. In the same way the exchange of products between coastal and inland tribes, such as fish and edible seaweed for birds or fresh-water crayfish, was always a matter of ceremonial exchange of gifts. A hint was dropped, in cases of doubt as to the object preferred, by expressing admiration for its fine qualities. No form of bargaining or haggling ever obtained; it would be quite repugnant to the Maori feeling of what was *tika* (etiquette; "correct"). In the case of an inadequate return for a gift, nothing was said at the time in the presence of the donors, but it would be freely and widely commented on later, to their great shame and the detriment of their reputation among the tribe; hospitality and generosity were ever the two prime virtues in Maori society. In all such matters the power of public opinion was very efficacious in stimulating the lagging one, and was, in fact, a definite social force, functioning as a determinant of economic action. The actual mechanism by which the ceremonial exchange of gifts was effected was somewhat complex; similarly intricate organisation operated in the sphere of distribution as regards the apportionment and ownership of goods.

The grouping of the Maori for economic purposes in *whanau* (*Grosfamilie*), *kainga* (village) or *hapū* (sub-tribe) was facilitated by the strong sense of the power of the kinship tie, the descent from a common ancestor. In this way the chief, as lineal head of the group—the rest of the people being his *teina*, or relations through various junior lines of descent—naturally assumed his function as organiser of production, leader of industry, and director of the community in the economic sphere. This position was due, not to his wealth, but to his social status by birth.

This felt reality of kinship bonds was also intimately connected with the general phenomena of production and distribution. For one could have observed under the old Maori system several extremely interesting features of the communal organisation of industry, and I have noted relics of it even in these degenerate days. In former times the product of each man's labour, in certain branches of work, was not retained by him for his own private use. It was not handed over to his wife and children for family consumption; it was contributed to the common stock of the village. With all primitive peoples the most important

economic undertaking is the provision of food, and here, in this department of life which is so essential to existence, we find that the Maori had subordinated the claim of the individual in regard to the products of his labour, to that of the community. To take an example of which I have received the details from native friends—the disposal of a catch of fish or birds. When the season had been opened with proper ceremony, the men went off for the day, each to his own particular spot, where he had the right of operating line or net, bird spear or snare. On return, late in the afternoon, each man laid down his catch in a heap on the *marae*, the public square in the centre of the village, where it was viewed, appraised and commented on by the people, after which the operations of cooking and preserving were carried out, and the food was added to the communal larder of the village. From this it was taken out and consumed as occasion required. All meals were taken together on this *marae* and each person received a portion of food in a little freshly woven basket, but this portion had no relation to the individual's contribution to the food supply. All persons in the village shared the meal, and the only people who might receive any special treatment were the respected and highly sacred chiefs, and the *tohunga* (priests), who might get an extra tasty morsel in their baskets by virtue of their rank, prestige or social status. At Te Ngae in the Rotorua district there are at the present day stores of preserved food contributed as mentioned above, and owned neither by the chief nor any other individual, but held for village use. And even as each man adds his share to the common food supply according to his powers, so he assists in consuming it with the same impartiality. This working for the common good, though most conspicuous, perhaps, in the matter of food, was a widespread feature of Maori industry.¹

The people engaged in communal work to quite a large extent. Houses were built, trees were felled, forest clearings were made, ground was broken up for cultivation, the *kumara* or sweet potato (*Ipomœa batatas*) was planted and harvested, eel-weirs and seine nets were constructed by the united labour

¹ Elsdon Best, touching incidentally on this point in several of his writings, has used the term "communitic" as signifying the general Maori economy. This does not seem to me to be strictly accurate, since it implies the absence of private property, an institution which definitely existed among the Maori; or that the former economic organisation of our Polynesian friends may have had close affinities with the present doctrine of Communism—another misleading notion. It is a question of terminology, since Mr. Best is well aware of the true nature of Maori institutions, but one that is worthy of note.

power of the members of the village, working in concert under the direction of the chief. To cope with an extra heavy piece of work, such as the hauling of a log on skids out of the forest to be hewn into a canoe or the ridge-pole of a huge meeting-house, the assistance of other villages or *hapū* (sub-tribes) was often summoned.

Still, many tasks were performed by the individual craftsman, who made and hafted his own stone adzes, shaped his own bird spears, pigeon troughs, fish-hooks, floats, sinkers, shell-fish dredges, his wooden cultivating tools, his greenstone neck and ear ornaments, and numerous other articles of common use. These, subject to the exercise of certain customary privileges of appropriation by his friends and relatives for offences committed by him, were his own private property.

The most general features of Maori industry have been indicated in brief compass, and attention may now be directed to a few points worthy of slight elaboration, in view of misconceptions in regard to these phenomena of primitive society.

Pleasure in Work

The Maori of old was endowed with much artistic taste and skill, even when judged by modern European standards, and showed great aptitude in the decoration, by means of incised or perforated carving, of all his objects of use and adornment. Of the more prominent examples of fine workmanship the *whare whakairo* (the carved house of superior type), the war canoe, and the *pataka* of the better class, huts for the storage and preservation of valuable personal property, were the most noted for their beautiful carving. These were prized possessions of chief and tribe. But the humbler implements of everyday use, the production capital of the ordinary workman, were also graced and ornamented likewise with some design, often of elaborate character, carved with stone chisel and wooden or bone mallet. The amount of such extra-economic work performed in pre-European days was enormous, and involved the expenditure of immense time and labour. The tools and implements were not necessarily improved for utilitarian purposes by this decoration; in some cases it appears that the manufacture of the tool has been carried beyond the point of greatest practical utility and service, as in the case of some polished stone adzes in my possession, where the work of finishing has been carried even to the butt or poll, which, being thus smoothed, offers a less efficient grip to the lashing

which has to bind it to the haft. Here the production of an æsthetically pleasing implement has resulted in a slight but positive disutility in regard to the purpose for which it was primarily made. But apart from such instances, it is still obvious that the labour expended in finishing the tool was often carried far beyond the point at which it was compensated by any proportionate increase in the utility of the tool to serve its manifest purpose. Nor could the craftsman recoup the extra expenditure of his labour in another way, by disposing of the implement to some other man, and receiving from him an equivalent amount of goods for its enhanced value. For, as already stated, a fully-equipped system of division of labour and specialisation of employments did not obtain among the Maori, and such exchange as existed was therefore largely an inter-tribal affair, being confined mainly to the transfer of local for non-local goods, and reciprocal gifts of ceremonial objects. Generally speaking, tools and implements were not made or ornamented for exchange. From this it follows that the careful application of extra effort, skill and finesse, though resulting in utility (in the economic sense of satisfaction of desire) to the craftsman, yet involves the creation of no further exchange value. As we know from the natives themselves, desire for gain was not the impelling psychological factor in this additional labour performed on their implements.

The reason for this extra-economic activity, if it may be so termed, was complex: it was in part the desire of the native artisan to complete an article which he felt to be a worthy product of his skill, it was partly his wish to earn the commendation of his fellow-workers and the rest of the village for his ability, but it was mainly his love of the work itself and his pleasure in manipulating his tools. This pleasure in work for its own sake, irrespective of any benefit which might accrue, though especially noticeable in the sphere of carving, was a constant characteristic of other types of Maori industry. It is an element which must be taken into account before any facile generalisations are made about the economic motives of the savage.

Magic and Work

The *tohunga*, or priestly expert, versed in charms, incantations and sacerdotal lore, was the leader and adviser in religious and magical affairs, and it is not always realised how deeply Maori industry—or all primitive economics for that matter—was permeated with these magical ideas and ceremonial performances.

As a brief illustration of how magic entered into an occupation we can refer to Elsdon Best's account of the initiation of a girl into the full knowledge of the arts of weaving—an event of great moment to a Maori maiden of former days, by reason of the importance of weaving in the household economy.¹ In all such initiations the first task of the priest was to recite an incantation to render the pupil clear-headed, and to endow her with a receptive mind, a retentive memory, and ability to grasp the new knowledge. The pupil was seated before her *turuturu* (weaving sticks), and before her were displayed garments of different types and of fine design, with borders of coloured fibre, woven by a skilled hand. These were present to serve as a model to the girl—not for actual design but for fine and neat workmanship. She then took in her hand some prepared fibre and held it while the priest repeated a *karakia*, an incantation to fix firmly the new-found knowledge in her mind. As this was finished the pupil stooped forward and bit the upper part of the right-hand weaving stick, which was *tapu* (sacred). Then with the prepared fibre that she had been holding she wove the first and sacred weft across the frame. Having now entered upon her career as a weaver, she commenced to make her first garment. Afterwards the *whakanoa* ceremony to remove the sacredness of the initial rite was performed, involving the repetition of another spell and the ritual tasting of certain food.

While the above ceremonies and the first piece of weaving were being carried out the pupil was not allowed to partake of any ordinary food, to enter a place where food was cooking, or to associate with the rest of her family in any way. And even when her initiation was complete, the regulations of magic did not desert the weaver. Certain precautions must be always observed. Even to-day women will never eat in the same house as their work without covering it up. If a stranger comes when a woman is making a garment, the weaving sticks are at once loosened and the work covered up and laid aside. Even if a close relative comes into the house the work is momentarily ceased and the right-hand stick inclined across the work until the visitor is seated. If anyone should go round to the back of the work on the side opposite the weaver and examine it, that is an *aroakapa*, a bad omen. Moreover, it is an evil omen for the weaver to leave an *aho* (a weft) uncompleted at sundown, when she leaves off work; it should be carried right out to the margin

¹ Best, "Art of the Whare Pora: Notes on Clothing of the Ancient Maori," etc., *Transactions New Zealand Institute*, Vol. XXXI, 1898, pp. 627-632.

• of the garment. If not, it is believed that the powers of concentration and memory of the weaver will forsake her and she will never be able to finish that garment. Te Rangihiroa (Dr. Buck), our greatest authority on weaving, suggests an economic explanation for certain of these omens. To continue with the weaving when strangers were present, or to leave a garment still set up and uncovered, would allow others to study pattern and method and to imitate the work. Hence a weaver with a reputation for excellent technique or fine patterns would soon lose it through the copying by others. And in the case of the uncompleted weft, the structure of the work was such that it easily became unravelled, to the detriment of the garment in preparation.¹ Hence, perhaps unconsciously, a utilitarian precaution was erected into an omen, and common sense reinforced by magical regulation.

In production of all kinds magic entered to an extraordinary extent. Spells were used by men in fowling, fishing, carving and tattooing, by house and canoe architects to give them success in their work, and some of the ritual was of a most complicated and sacred nature. In fact, no economic undertaking could be entered upon without its magical accompaniments. The omission of these in Maori eyes spelt certain disaster to the enterprise, just as much as if some important practical operation had been neglected. The two aspects of an undertaking, esoteric rite and practical work, clearly differentiated in the native mind, were yet complementary—proper use of each, on the lines laid down by custom and tradition, was the only road to material prosperity.

The question then arises, what is the relation of this magic to any actual economic performance? Though one be not well enough endowed with faith to believe with the Maori that great virtue emanates from the incantation, yet it cannot be denied that the magical ceremony does definitely influence the conditions of the phenomena, and has an actual, though indirect, economic function. In the case of the ceremonies at the initiation of the weaver, the recitation of the *karakia* (incantation) acts as a stimulus to her faculties. She firmly believes as the words fall from the lips of the expert that the incantation is sharpening her powers of perception and retentiveness, strengthening her memory, giving her the ability to grasp what she is taught and to faithfully reproduce it. In consequence of her belief, by a natural psychological process, confidence comes to her, the fears

¹ Te Rangihiroa (P. H. Buck), *Journal Polynesian Society*, Vol. XXXIV, No. 1 (March 1925), p. 85.

of making slips in her work or of forgetting the pattern are dissipated, and in consequence she proceeds with greater real aptitude for the task; her fingers tend to be more sure, and her technique to improve. The same is the case in the various food pursuits. In fish-spearing, in bird-snaring, in rat-trapping, or tree-climbing, belief in one's own powers is a requisite for the attainment of the object, and it is this necessary confidence and assurance in oneself that the various magical ceremonies provide and fortify.

Moreover, by their sacred character they may not be lightly disregarded, unless at risk of supernatural punishment. This impressive character of the rite tends to concentrate the full attention of the operator upon the matter in hand, with further good results from the economic point of view. The actual form of the ritual itself often aids in the same process. The correlation of certain objects, acts and postures with definite stages in the progress of the task is a general feature of all economic magic, and serves to focus the attention of persons upon the correct sequence of operations necessary to complete the work. Incidentally, it was a piece of rational, as well as magical psychology, to display pattern garments of first-class technique before the weaver at such a critical and impressionable period as was her time of initiation into the craft.

To sum up—the magic of production was not merely an excrescence upon the economic life of primitive man, but fulfilled a definite and most important function, in giving confidence to the workers, in acting as a stimulus to activity, and in helping to focus the attention of the craftsmen more assiduously upon their task. All this is of advantage to production from the purely economic point of view.

Forethought and Saving

Primitive man, having no opportunity to speak for himself, has been rather badly handled by theorists who have had occasion to mention various aspects of his economic life. On the question of provision for future needs he is generally dismissed in one phrase—he has “no foresight.”¹ Consideration of Maori

¹ As an example of statements made by even the most eminent of economic authorities, I quote from Professor C. Gide: He speaks of our civilised tendency, “à nous préoccuper sans cesse de l'avenir,” and continues, “Mais c'est là un effort intellectuel inaccessible au sauvage, qui n'a conscience que du besoin qui le presse et qui, suivant l'expression célèbre de Montesquieu, coupe l'arbre au pied pour avoir le fruit.”—*Principes d'Economie Politique*, 10^{me} éd., 1906, p. 632 (also in 23^{me} éd., 1921)

society reveals that, relative to the means at his command, he exercises quite considerable care and forethought, amounting at times to actual voluntary abstinence, in attempting to make more sure his material future prospects.

I select from many examples that of the preservation of food for future use. In securing any of the main kinds of food it was always the object of the native to obtain as much of a surplus as possible, over and above the quantity required for immediate needs. It was not always managed, but at the digging of the fern root, the snaring of birds and of the little frugivorous rat, a surplus was always looked for, while a sufficient quantity of seed tubers of the *kumara* (sweet potato) was always planted to yield under normal conditions a harvest ample enough to form the staple of diet for the whole succeeding year. A surplus of any food was never wasted but always carefully preserved for future use, and each kind had its own well-recognised mode of treatment to best ward off decay. *Kumara* were stored in underground pits, a warm sunny day being chosen to avoid damp and mould, while each tuber was delicately handled to avoid bruising, since it was only with the utmost precaution that a stock of this—the basic food—would last from one season to the next. Fern root, fish, sharks, crayfish, shellfish, were all dried, each by a special method, and would last so for a long period, while rats and birds of a dozen species were potted in calabashes or kelp vessels and preserved in their own fat. These reserve stocks of food were drawn on as occasion required, some being used for ordinary daily consumption, others for the entertainment of visitors, and others as gifts or in a kind of primitive exchange of goods for services.

Again, a rigid prohibition was imposed on the taking of birds in the nesting time; a kind of "close season" was proclaimed, and punishment was inflicted upon anyone who broke this rule, which was enforced by magical means. This protection of the birds was a deliberate effort to conserve the available food supply by restriction of present consumption, in order to ensure reasonable prospects of future abundance. Despite periodical outbursts of extravagance and waste of wealth, as at native feasts, it is plain from these instances given that relative always to his cultural circumstances, primitive man is not lacking in forethought, but endeavours by constant, well-defined and practical efforts to provide for future needs.

Under certain circumstances the native was even capable of real saving—understanding by this the restriction of the satis-

faction of wants in such manner that the existing stock of capital is not merely replenished but actually augmented. When the chief, out of the stores of food which accrued to him in various ways (by the work of himself, his wives and slaves, and by tribute), diverted a portion to maintaining and rewarding some adze-men and carvers, who were thereby induced to hew out a canoe, he made an actual addition to the capital of the community and one which could be later utilised for further production.

A note in conclusion. The study of primitive economics should need no justification. But it may not be superfluous to point out that the investigation of the structure and working of native industrial organisation is of value in reference to the much-discussed problem of the decay of native races upon contact with the white man. To the disruption of the former native culture, with which is associated the breakdown of his former economic system, with its complex, often cumbrous mechanism, is to be attributed much of their decline. A closer study of the problems of primitive economics would reveal how—to mention but a few causes which have deeply affected the Maori—the lessening of the authority of chiefs (involving a dislocation of the mechanism of distribution), the suppression of polygamy and of all forms of slave labour, the discountenancing of every kind of magic, and the dissolution of communal ownership are tending to destroy some of the foundations of the economic organisation of the native, and so to weaken his resistance to the new forces which assail him.

RAYMOND FIRTH

THE DEVELOPMENT OF RUSKIN'S VIEWS ON INTEREST

SHYLOCK hated Antonio mainly

“ for that in low simplicity
He lends out money gratis, and brings down
The rate of usance here with us in Venice.
. and he rails
Even there where merchants most do congregate,
On me, my bargains, and my well-won thrift,
Which he calls interest.”

Apparently in Shakespeare's time the term “interest” conveyed an insinuation of malpractice not connoted sufficiently by the word “usury.” “Unto a stranger thou mayest lend upon usury; but unto thy brother thou shalt not lend upon usury,” is the law of Deuteronomy (xxiii. 19). The Christian Church condemned all usury and practically made no distinction between interest on alleged equitable moderate terms and any other kind of interest. “Now,” says Professor Nicholson, “the man who does not in some shape or other lend his capital upon ‘usury’ is, in the modern world, generally considered as lacking in his duty to himself or his family.”

No thought of any radical iniquity in charging “a rate of usance” to strangers had occurred to Ruskin when he began to write on Political Economy. His *Unto This Last* scarcely touches the subject of interest at all, and in his *Munera Pulveris*, written in 1862-3, he definitely states that “Usury merely means taking an exorbitant sum for the use of anything,” and goes on to point out that “it is no matter whether the exorbitance is on loan or exchange, on rent or on price.” Nevertheless the crack in the raft on which he is sailing is already apparent when he says, “such gain as is dependent on keeping the exchangers ignorant of the exchange value of the articles, or on taking advantage of the buyer's need and the seller's poverty, is one of the essential and quite the most fatal forms of usury; . . . the essence of the usury being that it is obtained by advantage of opportunity or necessity and not as due reward for labour.” In this volume, also, the baseness of demanding interest on war loans is already

emphasised, and he wonders how it is "that ever men should have come to value their money so much more than their lives, that if you call upon them to become soldiers and take chance of a bullet through their heart and of wife and children being left desolate, for their pride's sake they will do it gaily without thinking twice; but if you ask them for their country's sake to spend a hundred pounds without security of getting back a hundred and five, they will laugh in your face."

In a note to the last chapter of *Munera Pulveris*, published in *Fraser's* in 1863, Ruskin says, "I have not hitherto touched on the subject of interest of money; it is too complex and must be reserved for its proper place in the body of the work. The definition of interest (apart from compensation for risk) is 'the exponent of the comfort of accomplished labour, separated from its power'; the power being what is lent: and the French economists who have maintained the entire illegality of interest are wrong; yet by no means so curiously or wildly wrong as the English and French ones opposed to them, whose opinions have been collected by Dr. Whewell at page 41 of his *Lectures*; it never seeming to occur to the mind of the compiler, any more than to the writers whom he quotes, that it is quite possible, and even (according to Jewish proverb) prudent, for men to hoard as ants and mice do, for use, not usury; and lay by something for winter nights in the expectation of rather sharing than lending the scrapings."

In January 1864 Ruskin's father died. To his wife he bequeathed £37,000, of which £15,000 was Bank Stock, and the house at Denmark Hill for life; to his son £120,000, of which £40,000 were in stocks, his leases at Herne Hill and Denmark Hill, his freehold pottery at Greenwich and his pictures, then estimated by him as worth £10,000. Thirteen years afterwards Ruskin told his readers what he did with the money. Only one paragraph of his statement need be quoted here.

"My first performance was the investment of fifty thousand pounds in 'entirely safe' mortgages, which gave me five per cent. instead of three. I very soon, however, perceived it to be no less desirable, than difficult, to get quit of these 'entirely safe' mortgages. The last of them that was worth anything came conveniently in, last year. I lost about twenty thousand pounds on them altogether."

He says nothing elsewhere on the subject of mortgages, but anyone who realises that the safety in a mortgage investment lies in the power of foreclosure will understand that the effect of

this experience on Ruskin must have been like the proverbial "continual dropping on a very rainy day," in a wet weather climate.

In January 1865, in a lecture to a Working Men's Institute (afterwards published as one of *Three Lectures on Work, Traffic and War*, under the title of *The Crown of Wild Olive*), we have evidence of the kind of cynicism which arises from the cynic's criticism of his own actions. "We do great injustice to Iscariot," says Ruskin, "in thinking him wicked above all common wickedness. He was only a common money-lover. . . . He was horror-struck when he found that Christ would be killed; threw his money away instantly, and hanged himself. How many of our present money-seekers, think you, would have the grace to hang themselves, whoever was killed? . . . Judas had seen (Christ) do miracles, thought He was quite strong enough to shift for Himself, and he, Judas, might as well make his own little by-perquisites out of the affair. Christ would come out of it well enough, and he have his thirty pieces. Now that is the money-seeker's idea, all over the world." A little further on he comes almost accidentally to the truth which eventually had the most weight with him, "for borrowers are nearly always ill-spenders, and it is with lent money that all evil is mainly done, and all unjust war protracted."

Six years later, in January 1871, he began the series of Letters entitled *Fors Clavigera* and started the practice of self-flagellation at once. "If all the money of all the capitalists in the whole world were destroyed, the notes and bills burnt, the gold irrecoverably buried, and all the machines and apparatus of manufactures crushed . . . in one catastrophe; and nothing remained but the land with its animals and vegetables, and buildings for shelter,—the poorer population would be very little worse off. . . . It is only we who had the capital who would suffer; we should not be able to live idle as we do now, and many of us—I for instance—should starve at once." But he goes on: "I will show you that our money is really likely to be useful to you in its accumulated form . . . so only that you are careful never to let us persuade you into borrowing it, and paying us interest for it." He reproduces "an amusing story" from what he henceforth calls the Cambridge Catechism. James has made a plane for himself which William desires to borrow; the dialogue ends as follows:

James.—"I made the plane for myself, and not for you. I expected to gain some advantage from it. I have made the plane

for the purpose of improving my work and my condition; if you merely return it to me in a year (*i.e.* a new plane) it is you who will gain the profit of it during the whole of that time. I am not bound to do you such a service without receiving anything in return. Therefore if you wish for my plane, besides the restoration already bargained for, you must give me a new plank as a compensation for the advantage of which I shall be deprived." (The story-teller proceeds):

"These terms were agreed to, but the singular part of it is, that at the end of the year, when the plane came into James's possession, he lent it again; recovered it, and lent it a third and fourth time. It has passed into the hands of his son, who still lends it. Let us examine this little story. The plane is the symbol of all capital, and the plank is the symbol of all interest."

Ruskin abridges the story: "James makes a plane, lends it to William on 1st January for a year. William gives him a plank for the loan of it, wears it out, and makes another for James which he gives him on 31st December. On 1st January he again borrows the new one, and the arrangement is repeated continuously. The position of William therefore is, that he makes a plane every 31st of December; lends it to James till the next day, and pays James a plank annually for the privilege of lending it him on that evening. This in future investigations of capital and interest we will call, if you please, 'The Position of William.'"

Three months later he writes: "In this present April, I am so much a fool as not even to know clearly whether I have got any money or not. I know indeed that things go on at present as if I had; but it seems to me that there must be a mistake somewhere and that some day it will be found out. For instance, I have seven thousand pounds in what we call the Funds or Founded things; but I am not comfortable about the Founding of them. . . . All that I know of them is that this bit of paper gives me a right to tax you every year, and make you pay me two hundred pounds out of your wages; which is very pleasant for me; but how long will you be pleased to do so? Suppose it should occur to you, any summer's day, that you had better not? Where would my seven thousand pounds be? In fact, where are they now? We call ourselves a rich people; but you see this seven thousand pounds of mine has no real existence;—it only means that you, the workers, are poorer by two hundred pounds a year than you would be if I hadn't got it." He examines his other sources of income and concludes: "Whenever I examine into these possessions I find they melt into one or another form

of future taxation and that I am always sitting (if I were working I shouldn't mind, but I am only sitting) at the receipt of custom, and a Publican as well as a sinner."

In August 1871 he writes: "All France, it seems, is in a state of enthusiastic delight and pride at the unexpected facility with which she has got into debt. . . . Everybody in France who has got any money is eager to lend it to M. Thiers at five per cent. . . . First you spend eighty millions of money in fire-works, doing no end of damage in letting them off. Then you borrow money, to pay the firework-maker's bill, from any gain-loving persons who have got it. And then, dressing your bailiff's men in new red coats and cocked hats, you send them drumming and trumpeting into the fields, to take the peasants by the throat, and make them pay the interest on what you have borrowed; and the expense of the cocked hats besides. That is 'financiering,' my friends."

Ruskin's mother died at the end of this year, leaving her son all that she possessed, the capital she had inherited, apparently, being untouched since the death of her husband nearly seven years before. In the light cast by his own income, Ruskin in June 1872 examines Fawcett's *Manual* (1869) with reference to interest. Interest, said Fawcett, consists of three distinct parts: (1) Reward for abstinence, (2) Compensation for the risk of loss, and (3) Wages for the labour of superintendence. Reversing the order, Ruskin sweeps away the third and second parts. "I have at this moment," he says, "£15,000 of Bank Stock and receive £1,200 odd, a year, from the Bank, but I have never received the slightest intimation from the directors that they wished for my assistance in the superintendence of that establishment;—(more shame for them). . . . Your business is to choose and pay your superintendent for his sense and not for his money.

"Next, by compensation for risk, does Mr. Fawcett mean protection from it, or reward for running it? Every business involves a certain quantity of risk, which is properly covered by every prudent merchant, but he does not expect to make a profit out of his risks, nor calculate on a percentage on his insurance. Does Professor Fawcett mean . . . that while the definition of the first part of interest is extra payment for prudence, the definition of the second part of interest is extra payment for imprudence? . . . So far from receiving my dividend as compensation for risk, I put my money into the bank because I thought it exactly the safest place to put it in. But nobody can be more anxious than I to find it proper that I should have £1,200 a year. Finding

two of Mr. Fawcett's reasons fail me utterly, I cling with tenacity to the third, and hope the best from it. . . .

"My £1,200 then are given me as 'the reward of abstinence.' It strikes me upon this, that if I had not my £15,000 of Bank Stock I should be a good deal more abstinent than I am, and that nobody would then talk of rewarding me for it. . . ."

And Ruskin ends: "Not a cake and a quarter to-morrow, dunce, however abstinent you are—only the cake you have—if the mice don't get at it in the night."

Three months later we learn that an impatient correspondent, Mr. W. C. Sillar, who has long been hotly engaged in testifying publicly against the wickedness of taking interest, has written to Ruskin to complain that all he says is mysterious, that he is bound to speak plainly, and above everything, if he thinks taking interest sinful, not to hold Bank Stock.

"Once for all, then," says Ruskin, "Mr. Sillar is wholly right as to the abstract fact that lending for gain is sinful . . . and . . . I take the interest of Bank Stock, because though taking interest is, in the abstract, as wrong as war, the entire fabric of society is at present so connected with both usury and war, that it is not possible violently to withdraw, nor wisely to set example of withdrawing, from either evil. . . . 'Ananias over again, or worse,' Mr. Sillar will probably exclaim when he reads this, and invoke lightning against me."

Ruskin had already appended a note to his *Munera Pulveris* (published in volume form in 1872) giving his adhesion to Mr. Sillar's views that payment of interest of any amount whatever is real "usury" and entirely unjustifiable. But although he had collected much combustible material towards the destruction of interest, his conscience failed to supply the necessary fire. He knew that he could have made out a much better case for the "fair rate" than Fawcett had done, and was perhaps still inclined to believe that it had its place in honest business transactions. A burning flame of indignation took possession of him, however, when, on a visit to Rome, he found that the slope of the Aventine, under the wall of Tullius, opposite the farm of Cincinnatus, had just been sold on building leases to a company. "Now this anonymous society," he writes, "which is about to occupy itself in rebuilding Rome, is, of course, composed of persons who know nothing whatever about building. They also care about it as little as they know; but they take to building because they expect to get interest for their money by such operation. Some of them, doubtless, are benevolent persons, who expect to

benefit Italy by building; and think that, the more the benefit, the larger will be the dividend. . . . But observe in what its dividends will consist." For Ruskin's detailed account of what these builders would do may be substituted Mr. Stillman's account written fifteen years later of what they did do. "The greater part of the new city is composed of great stucco apartment-palaces with dividing walls that hardly serve for privacy, huge tenement houses so flimsy in construction that several of them have fallen into the street in the process." "Of such architecture," continues Ruskin, "the anonymous society will produce the most it can; and lease it at the highest rents it can; and advertise and extend itself so as, if possible, at last to rebuild, after its manner, all the great cities of Italy. . . . But of course all our great building work is now carried on in the same way; nor will any architecture, properly so called, be now possible for many years in Europe. For true architecture is a thing which puts its builders to cost—not which pays them dividends. If a society chose to organise itself to build the most beautiful houses, and the strongest that it could, either for art's sake, or love's—either palaces for itself, or houses for the poor—such a society would build something worth looking at, but not get dividends."

From this time forward Ruskin ceased to be half-hearted. According to his definition, "Usury is properly the taking of money for the loan or use of anything (over and above what pays for wear and tear), such use involving no care or labour on the part of the lender."

"It is enough to show the especial and subtle evil of usury, to reflect on the general fact in human nature, that while we won't give anybody half a crown without asking what he wants with it, we will lend him any quantity of millions to commit murder with, or do what else he likes."

"The principle of Righteous dealings is, that if the good costs you nothing, you must not be paid for doing it. Your friend passes your door on an unexpectedly wet day, unprovided for the occasion. You have the choice of three benevolences to him—lending him your umbrella—lending him eighteen-pence to pay for a cab—or letting him stay in your parlour till the rain is over. If you charge him interest on your umbrella, it is profit on capital—if you charge him interest on the eighteen-pence, it is ordinary usury—if you charge him interest on the parlour, it is rent. All three are equally forbidden by Christian law, being actually worse, because more plausible and hypocritical sins than if you at once plainly refused your friend shelter, umbrella or

pence. You feel yourself to be a brute in the one case, and may some day repent into grace; in the other you imagine yourself an honest and amiable person, rewarded by Heaven for your Charity; and the whole frame of society becomes rotten to its core."

Two years later Ruskin believes his failure to secure allegiance to his St. George's Society, except from a little group of men and women, to be due to his voice on interest having an uncertain sound, "because I have not yet given myself to it wholly, but have halted between good and evil, and sit still at the receipt of custom, and am always looking back from the plough." He goes on supplying weapons for his readers against himself by quotations from the works of the Sillar brothers and others. A year later R. G. Sillar writes that his former business as a banker and bullion broker is sealed to him as iniquitous, but he cannot make out what Ruskin wants him to do, and explains the impossibility of his waiting much longer for the plans of St. George's Society to mature. Ruskin publishes all these reproachful letters, and in 1876 gives a monthly account of his personal expenditure with commentaries. "How we usurers are to live, with the hope of our gains gone, is precisely the old temple of Diana question. . . . And there are many amiable persons who will not directly see their way, any more than I do myself, to an honest life; only let us be sure that this we are leading now is a dishonest one." And later: "I am a little ashamed of my accounts this time, having bought a missal worth £320 for myself, and only given one worth £50 to Sheffield. I might state several reasons, more or less excusing this selfishness, such as, etc.—but I must beg my severely judging readers in the meantime rather to look at what I have done than at what I have left undone, of the things I ask others to do." He publishes the earnest wish of an American Quaker, Mr. Rushmere,¹ that "Mr. Ruskin could feel it his duty to act promptly in withdrawing his money from usury," and for the first time points out to "those religious gentlemen who have had the goodness to concern themselves about his inconsistency," that while the arrangement they propose would be a release to himself, it would be an exceedingly inconvenient one to a number of persons at present dependent on him for daily bread, who, not sharing his views about Interest, would have no consolation in their martyrdom.

At last, in the spring of 1877, he informs his "fellow-workmen

¹ Mr. Rushmere enclosed 3s. for Sillar's pamphlets and "took pleasure in the thought that the payment, though trifling, goes to St. George's Fund."

and labourers of Great Britain " what he has done with the fortune he inherited and what he proposes to do. He averages his expenditure at £5,500 a year for thirteen years, assigning £70,000 therefore to " yearly spending," £20,000 to loss on mortgages, £17,000 as gift to relations, £15,000 to loss to relations, £15,000 to what he calls " harness and stable expenses," which include the purchase of Brantwood, the repairing of its house and the building of a lodge, the furnishing of his rooms, etc., at Oxford, and the purchase of pictures, and £14,000 in gifts to St. George and Oxford, making altogether £151,000.

On 1st April, 1877, he possessed—

In funded cash, six thousand Bank Stock, worth about £15,000.

Brantwood, worth with house and furniture, £5,000.

Marylebone freehold and leaseholds, £3,500.

Greenwich freehold, £1,200.

Herne Hill leases and other little holdings, £1,300.

Pictures and books insured for £30,000, worth at least double.

" Gathering the wrecks of me together, I could still now retire to a mossy hermitage on a little property of fifty-four thousand odd pounds; more than enough to find me in meal and cresses," says Ruskin. He proceeded to dispose of it.

The Marylebone property was assigned to the St. George's Company. Ruskin had already had the value of it back in interest and had no business to keep it any more.

Brantwood he retained, with its servants, all necessary to keep it in good order and to keep him comfortable and fit for his work.

The Herne Hill leases and little properties he made over to his cousin, Mrs. Severn, " she promising to keep his old nursery for him whenever he came to town."

He retained £3,000 to be spent that year " in amusing himself . . . at Venice and in the Alps and elsewhere."

His Bank Stock was to be sold and twelve thousand of Consol Stock purchased, which he says " will provide me with £360 a year, the proper degrees of the annual circle, according to my estimate, of a bachelor gentleman's proper income, on which if he cannot live he deserves speedily to die."

For his dependents and customary charities further provision had to be made, otherwise, he says, " Virtually I should then be giving away the lives of these people to St. George and not my

own." Although he had received no income at all for his literary work in the previous year, having spent £800 for printing his new books, he felt a confidence, amply verified, that if he would only stop working for the press, he could sufficiently maintain all his present servants and pensioners.

Lastly, his Oxford professorship was to provide for his expenses at Oxford as long as he was needed there.

Of course one of Ruskin's counsellors of perfection immediately wrote to ask why £360 from Consols was any less sinful than £1,200 from Bank Stock, especially as the former was interest on war loan. Ruskin, in handing over £7,000 Consols to the St. George's fund some years before, had remarked that "although the interest on consols is only the taxation on the British peasant continued since the Napoleon wars, still the little portion of his labour, the interest on our St. George's fund, will at last be saved for him, and brought back to him." Ruskin now replies to his correspondent. "All interest is usury; but there is a vital difference between the interest of an already contracted debt, and taking part in a business which consists in enabling new ones to be contracted. As a banker, I derange and corrupt the entire system of the commerce of the country; but as a stockholder I merely buy the right to tax it annually—which under present circumstances I am entirely content to do." His critic still felt worried. Ruskin had claimed to be "an outspoken and wholesome usurer; as a soldier is an outspoken and wholesome murderer." "Should you not," asks his correspondent, "rather live on your principal as long as it lasts?" Ruskin answers his critic's religious objections, and to the economic suggestion concludes: "So long as our national debt exists, it is well that the good Saint should buy as much stock of it as he can; and far better that he should take the interest already agreed for, and spend it in ways helpful to the nation, than at once remit it, so as to give more encouragement to the contraction of debt."

Throughout the whole of his examination of the morality of interest Ruskin was directing his attention to its economic effects. But he was not permitted to pursue this line of argument with his opponents. The editors of *Cornhill* and *Fraser's Magazine* had both been obliged to put an abrupt end to the publication of *Unto This Last* and *Munera Pulveris*; Professor Fawcett, personally challenged to reply to the criticism of his views, ignored the summons. The only people who came out into the open against him were the clergy. They said the Bible only forbade usury, not a fair rate of interest; that if usury had been

wrong in itself, the Bible would not have permitted Jews to lend upon usury to strangers; and whatever the Old Testament said, the New Testament imposed putting one's money in the bank at a rate of interest as a duty in the parable of the ten talents. Sometimes Ruskin replied ironically by supposing that the methods adopted by the fraudulent steward were also set up for imitation, or referred his correspondent to Mr. Sillar's pamphlets.

But the whole argument of the Churchmen claiming interest as of God against Ruskin as Devil's Advocate and of Ruskin against the Churchmen is to be found in his last public utterance on the subject, entitled *Usury : a Reply and a Rejoinder*, published in the *Contemporary Review*, February 1880, the Reply being by Dr. Fraser, Bishop of Manchester, and the Rejoinder by Ruskin. The Bishop privately treated the Rejoinder as the " ravings of a lunatic "—Ruskin had suffered his first mental breakdown two years before, so this judgment was readily accepted. Those who read it in the light of a previous knowledge of Ruskin's teachings on political economy, with the further aid of Sir E. T. Cook's notes on his references to Biblical writers and Plato's Laws, are justified in regarding it as superb in its irony and as carefully just in its reasoning. As Sir Edward Cook mildly remarks : " It was the premises which the Bishop had to destroy, and this was a task which would perhaps have presented some inconveniences. For the position to which Ruskin sought to pin down his antagonist, and from which the argument proceeds with ruthless exactitude, is the condemnation of ' usury ' by the literal text of the Bible and by the authority of learned divines."

C. E. COLLET

A FOURTEENTH-CENTURY TREATISE ON MONEY

IN the 'sixties of the last century, when the late W. Roscher, Professor of Political Economy in the University of Leipzig, was engaged at the request of the Academy of Munich in researches on the history of Political Economy in Germany he came across a casual reference to a work by a certain Nicholas Oresme which he looked up merely in a perfunctory way, he tells us, and as an *opus supererogatorium*, but—"What was my surprise," he writes, "when I found before me a theory of money, elaborated in the fourteenth century, which remains perfectly correct to this day, in which the principles of the nineteenth century hold sway, and that with a brevity, precision, clearness and simplicity of language which proclaim aloud the superior genius of the author," whom he singles out as "the greatest scholastic economist." A fortunate chance put him on the track of this "precious stone buried in the dust," but his only merit consists in recognising "a diamond of the purest water, ignored for so many years." . . .

Roscher's appreciation of Oresme was read before the Institute of France in 1862 by Wolowski, to whom Oresme was not altogether unknown and who pronounced a panegyric of his own before the same society.

"A pupil of Aristotle," says Wolowski, "Nicholas Oresme has drawn from the great Greek Philosopher the doctrine of which he has been the enthusiastic interpreter. Aware by sad experience of the misfortunes following an alteration in the coinage, he has exposed its origin and real nature; he has defined the character and rôle of money with a clearness and force never since surpassed.

"When we consider the early epoch at which Oresme's work appeared, we hardly know whether to be more amazed at the vigour of the work or the oblivion into which his principles so clearly enunciated have fallen. It is not until the sixteenth century that we shall find them vindicated in Poland, Italy and France, and in the seventeenth century in England."

This high appreciation of Oresme's work has been amply endorsed by English-speaking economists. "No work extant," says Walker, "expresses more justly and strongly the pernicious

effects of that *morbus numericus* which wrought such misery among the peoples and caused such weakness in the Governments of Europe. . . . Oresme sets forth the principles of coinage and seigniorage with a precision nowhere surpassed" (*Money*, Pref., viii).

No further apology is needed for presenting readers of the ECONOMIC JOURNAL with a résumé of this celebrated work, which is all the more called for at the present time when so many unorthodox and revolutionary views on the subject of money are being foisted on the public. "The permanent hostility of the nations," says Wolowski in his study of Oresme, and his words are literally applicable to the present post-war situation, "commercial wars, alteration of the currency, disguised bankruptcies, assignats, paper money, a hatred of capital, chimerical schemes for financial rehabilitation, such is the sad outcome of false ideas on the subject of money."

Before we proceed to give an analysis of the work a few words on the author himself will not be out of place.

Nicholas Oresme was born in Normandy, apparently in the first quarter of the fourteenth century, about the time of the accession of the first kings of the House of Valois. Having obtained his Doctorate in Theology, he was appointed in 1355 Grand Master of the College of Navarre, where he had made his studies. He was promoted Archdeacon of Bayeux and Dean of the Chapter of Rouen, and is said to have been chosen in 1360 by King John (1350-1364) as tutor to his son, Charles V, but this is open to doubt. The year 1360 was the date of the Treaty of Bretigny, when King John was offered his liberty for a ransom of 3,000,000 gold pieces, but as he was unable to raise such a large sum in France he retired to captivity in England. His son, Charles, was at that time twenty-three years old and had been regent of France since the capture of his father at the battle of Poitiers in 1356. Be that as it may, Oresme was certainly the wise counsellor of the new king. In 1377 he was appointed thirty-third Bishop and nineteenth Count Bishop of Lisieux, where he died in 1382.

One of the most learned men of his day, he translated the *Ethics* and *Politics* and other works of Aristotle; wrote numerous sermons and theological works, and was commissioned by Charles V to translate the Bible into French.

The short French introduction to Oresme's Treatise, which is wanting in the Latin version, gives us a brief summary of the scope of the work. It is a "little Treatise on the First Invention

of Monies . . . to what end they were made; how they are to be made use of; to whom appertaineth the right to mint, debase or alter them, and what inconvenience follows therefrom. Compiled from several volumes to show the great abuses practised therein by the merchants and commonalty, abuses which Princes tolerate and suffer, and whence shall ensue divers irreparable damages if speedy remedy be not applied." . . .

Then follows a longer Prologue which notes that divers people maintain that "any King or Prince can of his own proper authority, right, or privilege alter the monies current in his kingdom and pass ordinance thereon at his own will and pleasure, and thereby reap profit and emolument." Such a monstrous privilege has, we know, been claimed by English sovereigns, notably the Tudors and Stuarts. "Nothing is more appropriate," says James I in the preamble to a Proclamation of Nov. 16, 1604, "to . . . princes than the ordering of their monies, and settling them at such prices and valuations as they shall think fit." . . . But as others deny to princes any such right or privileges, our author proposes to settle the question according to the principles of philosophy, and especially that of Aristotle, so that, a true decision having been arrived at, it may be put into practice to the benefit of king and people alike.

For at the present time, he says, everyone puts his own value on the coin of the realm, which is an insult to the prince whose figure it bears, and who, we may add, has vouched for its genuineness by allowing his image to be stamped thereon. "Nowadays the merchants have more ado to agree among themselves as to the price of money and its valuation than of the merchandise they deal in," and so the whole object of money is defeated, as it ought to be a fixed and invariable standard of value by which all sorts of variable values may be measured. "Whence gold and silver have reached so high a price that if a remedy be not speedily provided, divers baneful inconveniences are to be feared . . . such as the transportation of the specie, to wit, gold and silver, into neighbouring countries where their currency rate is higher . . . by the which outflow of specie the merchants would suffer loss in their goods and wares and would not have vent thereof in the said kingdom, thus drained of money; and again, what is worse, the changers and bankers who know where gold is current at the highest rate . . . do, by stealthy evasions, drain the country of its money and send it or sell it to merchants abroad, receiving from these other golden pieces compounded of base alloy with which they flood the country . . . and there is no

true footing or foundation on which one can calculate." These remarks may, *mutatis mutandis*, be applied to the depreciated currencies of our day, especially if for "base coin" we read "depreciated paper."

Next follow the headings of the twenty-six chapters of the work, of which the first seven are the most interesting and instructive. The first goes to the root of the matter and explains the origin and need of a circulating medium. The second and third treat of the most suitable materials for such. The fourth discusses its proper form and figure; the fifth, to whom belongs the right of coining; the sixth, to whom the money belongs when coined; the seventh, who should bear the expenses of coining, in other words, the question of seigniorage. The remaining nineteen chapters deal with the author's main thesis, the debasement of money, its rights and wrongs, and the various ways in which it is perpetrated; showing that it is worse than usury, is unjust to subjects and dishonourable and disadvantageous to the king himself; in fine, that it is an act of tyranny and that tyrannies cannot endure.

We shall now take a rapid glance at the first seven chapters as being the most important and suggestive. In the first, on the origin of money, he recalls the primitive state of barter (as economists have done from Aristotle to our own days), in which "one man abounded in sheep and was in need of bread, while the tiller of the soil had abundance of bread but was in need of cattle. Wherefore men began to traffic without money, and one gave the other a sheep for corn, while another gave his labour in exchange for bread or for wool. . . . But whereas in this manner of exchange and transport of goods many difficulties and disputes arose, ingenious men devised the use of money as an instrument for the mutual exchange of natural riches. . . . For monies are called artificial riches, seeing that . . . one may abound therein and yet die of hunger," as Aristotle and Ovid recount of King Midas.

Here we must join issue with our author and his master, Aristotle. Money is not to be called "artificial riches" simply because it does not immediately relieve human indigence or because man cannot eat it. Man cannot eat wool, cloth, timber, stone, iron, etc., and yet these things are rightly classed as wealth and riches. The error lies with those who regard money as synonymous with wealth, as being the only wealth. "For men," says Aristotle (*Politics*, I. ch. 9), "oftentimes suppose wealth to consist in the quantity of money which anyone

possesses . . . others, again, regard it as a mere trifle, as having no value by nature, but merely by arbitrary compact, so that if those who use it should alter their sentiments, it would be worthless, and unserviceable for any necessary purpose." Thus there are two opposing schools, one considering money as the sole wealth of man, the other regarding it as merely fictitious wealth, of merely conventional and no intrinsic value.

As "money is the instrument for exchanging natural riches" it should be "easily handled and light for carrying about," and hence should "be made of some precious and rare material, such as gold," if sufficient be found in the country; but if not it is also made of silver" (Chap. II.). "Again, it is not expedient for the body politic that such material should be too abundant, seeing that for this reason bronze money went out of use. Perchance also for this reason it has been disposed for the good of the human race that gold and silver, which are most suitable for this purpose, are not easily to be had in abundance." . . .

But "since it is expedient . . . to carry on sometimes a great and wholesale trade, sometimes a lesser, and most frequently a small trade or trade in small things . . . and since . . . the little piece of silver which should be fairly given for a pound of bread or such-like thing would not be palpable or easily handled on account of its excessive smallness, money was therefore made of some inferior material [in alloy] with silver, and thus black money (*nigra moneta*) had its origin, which is convenient for minute dealings" (Chap. III.). Such a mixture is not strictly a debasement, but it must never be made "unless through the necessity already alluded to . . . and for the common utility" for which money was invented.

Originally the metals were paid out by weight (Chap. IV.), but to prevent the trouble of constant weighing or assaying a stamp was put on them to guarantee that they were of "standard material and definite weight." Hence coins were originally and properly designated by their weight, or were synonymous with weights. A "penny" was a "penny-weight" of silver; a "pound" was a pound-weight of silver, coined or uncoined, and neither more nor less; but when coins were depreciated in weight and got fanciful names, *e.g.* "crowns," "nobles," "angels," etc., etc., people lost all sight of their legal and intrinsic value.

Coins "should be of a form and size easy of handling and counting, and of mintable material, easily stamped and retentive of the impression. And hence not every precious thing is apt for coining into money, for gems, lapis lazuli, pepper and such

like are not naturally suited for this purpose, but gold and silver are eminently so . . ." (Chap. V.).

In England and on the Continent in mediæval times, nobles of various degree, bishops and others obtained or assumed the privilege of minting money, and, owing to the unskilfulness of the minters or the inducement to profit by light weight, it is easy to imagine what monetary confusion must have been the result. Oresme is therefore right in insisting (Chap. V.) that "not everyone should be permitted to coin money or to impress a figure or image of this sort upon his own silver or gold," but that as money has been "instituted for the good of the community," the prince alone, "on behalf of the community, should have money stamped and coined with a suitable impression."

This does not mean (Chap. VI.) that "he is the lord or proprietor of the money circulating in his principality, for money is the instrument for effecting an equivalent exchange of natural riches . . . [and] is itself therefore the property of those to whom such riches belong. For if anyone gives his bread or the labour of his body for money, it is his when he receives it, even as were the bread and labour of his body." And if any were to object that the Saviour, on being shown a coin, asked, "Whose image and inscription is this?" and when they said to him, "Cæsar's," He answered: "Render then to Cæsar the things that are Cæsar's," etc., it is plain from the context of the Gospel that "the penny is said to belong to Cæsar, not because it was inscribed with his image, but because it was tribute." . . .

As the money belongs to the community, "so it should be coined at the expense of the community . . . for example, if from a mark of silver 62 *solidi* [shillings] can be made, and two shillings are needed for the labour and expense of minting, then the uncoined mark of silver will be worth or valued at 60 shillings and the other two will go to the minting." . . .

As it is impossible, within the limits of this article to summarise the remaining nineteen chapters, which, as we have said, deal with the debasement of monies, we shall merely extract some of the economic truisms which occur in the course of the argument.

Coins are weights and measures just as much as are weights and measures of corn, wine, etc., which are not allowed to be tampered with (Chap. XII.), and thus money should never be altered except necessity or the evident utility of the whole people require it (Chap. VIII.). As the money belongs to the community it is for them and them alone to alter it in extreme cases, *e.g.*

in time of war, for the redemption of the prince, etc. (Chap. XXII.). In such cases they not only *may* but *ought* to debase money, such being the fairest, cheapest, and easiest way of raising a contribution for rich and poor alike; but it is for the community to decide as to the prince's necessity (Chap. XXIV.).

There are three ways of getting unnatural gain from money: (1) by exchange, which is vile; (2) by usury, which is evil; (3) by alteration, which is very evil. The profit gained by debasing money is worse than usury, as in usury the gain is a matter of contract and the loan benefits the borrower; while that from debasement is against the will of the people, of no profit to them and affects all, and so is "tyrannical and fraudulent" (Chap. XVII.).

Sometimes evil things are tolerated (*e.g.* disorderly houses) to avoid greater evils or scandals; also base occupations, *e.g.* exchange and usury; but debasement of the coin engenders, instead of preventing, scandals, etc., and it was one of the causes of the fall of the Roman Empire (Chap. XVIII.).

Debasement is injurious to the prince himself, because (1) he who punishes forgery becomes himself a forger; (2) his money ought always to be the same instead of varying in value from place to place, so much so that people cannot know its value and must bargain about it and sell it as if it were merchandise (Chap. XIX.). It is injurious to the people, because (1) the prince may thereby attract to himself all the money of the community; (2) the evil is all the more grave as not easily perceived; (3) gold and silver are carried out of the country; (4) bad counterfeit money is imported from abroad; (5) metal consumed by melting and re-melting; (6) foreign merchants afraid to bring goods into the country where coin is debased; (7) in the country itself trade is confounded, and it is impossible to fix prices, taxes, revenues, etc. (Chap. XX.). Honest professions gain nothing, while vile professions, money-changers, bullion merchants, etc., gain most by debasement, and, moreover, they can profit by previous warning of the prince's intention to debase (Chap. XXI.).

We see from this that Oresme clearly enunciates the principles of the law to which the name of Gresham was given centuries later, a law which, in fact, was understood and alluded to many centuries before by the Greek poet, Aristophanes.

To those who might hold that the Pope could give a prince the right to debase his money, our author, while declining to discuss the power of the Pope, maintains that he never has

granted such a licence and never would, for it would be tantamount to giving a licence to do evil, which the Pope himself has no right to do. The same is to be said of the Holy Roman Emperor (Chap. XXIV.).

We have now, we think, said enough to show the sterling worth of this mediæval treatise, and to induce our readers to study the original, in which they will find the fundamental, immutable principles underlying every healthy monetary system, principles which must be taken into account in seeking for and applying a remedy to the parlous financial situation of present-day Europe.

DOM PATRICK NOLAN, O.S.B.

THE IRISH STAPLE ORGANISATION IN THE REIGN OF JAMES I

DURING the period when the staple organisation flourished, that is to say, from the early part of the fourteenth to the later part of the sixteenth century, there was no distinction made between England and Ireland except in a few minor details necessary because of the natural differences between the two countries. The trade of England and of Ireland was at that time on a footing of perfect equality, and no premonition was apparent of the systematic discouragement of Irish industry which was destined later to become such an unfortunately prominent feature of English commercial policy. The Ordinance of the Staple of 1326 appointed Drogheda, Cork and Dublin the staple towns of Ireland, and the provisions laid down for their government were identical with those laid down for the English staple towns created at the same time (Gilbert, *Ancient Records of Dublin*, Vol. I. p. 135). The Ordinance of the Staple of 1353 added Waterford as a fourth staple town, and again made no discrimination between England and Ireland, with the exception that a special provision was inserted allowing Irish and Welsh merchants to transport their goods to the English staple towns, "because merchant strangers do not come so commonly into Ireland or into Wales for merchandise as they do into England" (*Statutes of the Realm*, 1810 Edition, Vol. I. p. 332). In 1358, owing to the dangerous condition of Dublin harbour, the benefits of the staple privileges were extended to ships anchored within the port, and later in the same year to ships anchoring in ports within six leagues of the city (Gilbert, *Ancient Records of Dublin*, Vol. I. pp. 19-20). In 1363 Calais was restored to its position as foreign staple (Duke, *Prolusiones Historicae*, p. 65), a change which the Irish merchants seem to have felt as a hardship, for in that year petitions were presented from Dublin, Drogheda and Waterford in identical terms, complaining that "by pretext of a late ordinance for exporting all wool, hides and other merchandise from this kingdom to the town of Calais and not elsewhere, the burgesses were constrained to bring their merchandise, viz. old cloths, wool, hides,

and other small matters, much unlike the merchandise of other countries, to Calais, where they scarce sold for anything, and where wines, iron, salt and other goods useful for the land of Ireland were not to be found; and when the burgesses sold their merchandise at a low price in Calais, they were obliged to make a new freight to England, Gascony, or elsewhere to look for goods agreeable to their country, and so pay two freights for one to their great damage." In reply to these petitions the burgesses of Dublin, Drogheda, and Waterford were permitted to export direct to England (*Municipal Corporations Commission*, 1835, Appendix, pp. 581, 807; Gilbert, *Ancient Records of Dublin*, Vol. I. pp. 23-4). In 1375 Galway was considered to have attained a sufficient degree of commercial importance to deserve its own staple, and consequently this privilege was granted by a charter which professed to be "for the relief of the burgesses and merchants of the town, and that they and the other merchants of Connaught might no longer incur the dangers of shipwrecks . . . by going towards the city of Cork to pay their customs (Hardiman, *History of Galway*, p. 58). In the same year, a charter constituted a mayor and constables of the staple in Drogheda "as in four other towns of Ireland ordained for the purpose" (D'Alton, *History of Drogheda*, p. 165). The "four other towns" were Dublin, Waterford, Cork and Galway, and the number of Irish mediæval staple towns was then at its maximum, as the staple of Galway was abolished for some unexplained reason shortly afterwards (Hardiman, *History of Galway*, p. 59; *Chartæ etc., Hiberniæ*, pp. 69-70).

The staples continued to occupy a prominent and active part in the municipal and commercial life of these cities in the fifteenth century. Some idea of the way in which they were regulated may be gathered from the archives of Waterford printed by the Historical Manuscripts Commission. It was decreed, for example, in 1470 that no man should be received into the freedom of the staple without the advice of the merchants of the staple who should be present at the council, and that no man should be admitted "unless of the said city of Waterford and of the English nation or else he have his liberty of the King." The mayor, sheriffs and gaoler of the city were mayor, constables and marshal of the staple respectively (*Historical MSS. Commission*, Tenth Report, App., Pt. V. pp. 282, 306).

We are not concerned with the general history of the staple system, and there is no necessity to discuss in detail how it gradually and imperceptibly became obsolete. Numerous highly

controversial matters have been discussed in connection with the system, but all its historians are in agreement on at least one point, namely, that it was virtually extinct before the end of the sixteenth century. The fall of Calais was doubtless "the lingering but fatal wound" from which the system never recovered (Duke, *Prolusiones Historicæ*, p. 79). It is true that the staple was transferred to Bruges, but it was only transferred to be forgotten (Fox Bourne, *The English Merchant*, p. 25). The charter alleged to have been granted in 1562 to the Mayor and Constables of England, assuming it to have been granted at all, which is extremely doubtful, certainly did nothing to revive the moribund institution, which lingered on only as a name (Anderson, *History of Commerce*, 1764, Vol. I. pp. 125, 400; Cunningham, *English Industry and Commerce*, Vol. I. p. 498). The rise of the Merchant Adventurers displaced the staplers from their position of commercial importance (*ibid.*, Vol. I. p. 497) and the *coup de grâce* was administered by the prohibition of the export of wool (*ibid.*, Vol. I. p. 125). The export of wool from Ireland was prohibited by two statutes of Henry VIII (13 Hen. VIII, c. 27; 28 Hen. VIII, c. 17) and restrained by severe customs duties by two statutes of Elizabeth (11 Eliz. c. 10; 13 Eliz. c. 1). The second of these two Elizabethan Acts provided that cloth should not be exported from Ireland except from the staple towns, so that the separate existence of the latter must have still been recognised; but it is fairly safe to say that the prohibition of the export of wool—which it must be remembered took place much earlier in Ireland than in England—sounded the death-knell of the old staples, which had by the end of the sixteenth century become a thing of the past.

The reign of James I witnessed a remarkable attempt to revive the staple system in Ireland, or rather to create a new system of staple towns. Something of the kind may be traced to the reign of Elizabeth, when, for example, in 1571 the corporation of Carlingford was granted the right to have a staple and free merchants thereof with privileges like those of Drogheda (*Commission on Municipal Corporations*, 1835, App., p. 738); but, generally speaking, the granting of staple rights did not assume any serious proportions until the following reign. The movement was divided into two phases; the first phase took place between 1605 and 1610, and the second phase between 1616 and 1619. In the years 1608–10 numerous towns were granted the right to hold staples; of many of these grants we have records, and it is probable that there were others of which the records are lost. In 1608 the corporation of Galway petitioned for the grant of various

privileges, amongst others, "that, in consideration of the great increase of mercantile transactions, a guild of merchants of the staple might be incorporated," and the petition was duly granted, Ulick Lynch being appointed the first mayor and Walter Martin and Peter Lynch the first constables of the staple (Hardiman, *History of Galway*, pp. 98-100). In 1609 the new charter of Drogheda granted to the corporation, provided that there should be a guild of merchants of the staple in the town and county, consisting of a mayor, two constables, and such a number of the merchants as to the mayor and two constables should seem expedient; that the mayor, sheriffs, burgesses and commons of the town might once a year choose the mayor and constables of the guild, who were empowered to take recognisances of the staple and exercise the office according to the statute; that the mayor, constables and merchants of the staple might make byelaws; that no merchant but those of the staple should buy or sell any merchandise of the staple within the county on pain of forfeiting the goods, half to the King and half to the corporation, nor ship them unless purchased of a merchant of the staple of the town; and that none should buy or sell, by retail or private bargain, any merchandise within the franchise except merchants of the town and county (*Commission on Municipal Corporations*, App., p. 810). In the same year a charter granted a similar staple to Wexford, by which it was provided that the mayor of the borough should be mayor of the staple in the year after the termination of his office (*ibid.*, p. 622). The Cork charter created "a corporation of the staple with the same privileges as the corporation of the staple of London or Dublin" (*ibid.*, p. 28), and the Youghal charter granted a corporation of the staple "as fully as in Dublin," and provided that the mayor and bailiffs of the town in each year should be the mayor and constables of the staple in the following year (*ibid.*, p. 106). Similar charters were granted to Limerick (*ibid.*, p. 346), Dungarvan (*ibid.*, p. 64) and Kilkenny, the only inland town to which the privilege appears to have been extended (*ibid.*, p. 535). There is also evidence that Belfast possessed staple rights (*ibid.*, p. 698), and Carrickfergus was granted similar rights by a charter of 1612 (*ibid.*, p. 746).

It is apparent from these charters that the staples intended to be set up were modelled on the mediæval system, which, as we have seen, had practically been rendered obsolete by the loss of Calais. They possessed the same privileges with regard to the law merchant, were governed by the same organisation of a mayor and two constables, and, doubtless, were concerned with the

same commerce, namely, the export of wool. That export was prohibited by two statutes of Henry VIII, which had been repealed for all practical purposes by the later statutes of Elizabeth, but which were nevertheless still on the statute book and could be made the excuse for extorting fees for the grant of royal licences to export wool *non obstante* the statutes. In order that these grants of staple rights should possess any value, it was necessary that the towns enjoying them should also be granted *non obstante* licences. In fact, as will appear lower down, no practical result appears to have followed from these grants, and there is no evidence that the staples ever developed into active or even living organisations. In 1614 the export of wool was forbidden, not only to foreign parts, but even to England (*C.S.P.I.*, 1611-14, pp. 534-5); but it was explained by the Lords of the Council in London to Chichester in the following year, that "the prohibition was intended to apply to foreign parts, and not to England, whither it may be sent till the manufacture of cloth be better settled in Ireland" (*C.S.P.I.*, 1615-25, p. 84); and the King ordered the issuing of a proclamation to the effect that it should be lawful to export to England "such a quantity of wool as cannot well be draped in that kingdom" (*ibid.*, p. 94). Possibly the export which no doubt took place in pursuance of these directions was conducted through the newly erected staples, but of this there is no evidence. It must be remembered that it was at that time the policy of the Government to encourage the woollen manufacture in Ireland. It was at the same time sought to ensure that the surplus wool which could not be manufactured at home should provide raw material for the clothing trade of England rather than for that of her continental rivals. It therefore became important to provide that adequate machinery should exist to prevent Irish wool from being exported abroad and to collect the customs duties payable on its export to England. The provision of this machinery was the object of the new staple organisation of which we hear the first hint in 1616. The need for a new system of staples in that year is the best proof that the staples erected a few years earlier were ineffective, assuming them to have even come into existence.

The idea of the new organisation seems to have originated with Chichester and Grandison, and it was warmly taken up by the Privy Council, who appointed five commissioners to inquire into the project. The report of these commissioners makes it quite clear that the primary object aimed at by the scheme was the prevention of the export of Irish wool abroad, and, with this

object in view, they suggested the establishment of staple towns in England as well as in Ireland. They proposed that the Irish staples should be at Dublin, Drogheda, Waterford, Cork, Limerick, Galway, Londonderry and Carrickfergus, and the English at London, Bristol, Barnstaple, Workington and Chester or Liverpool. They further proposed that the staple towns should be governed alike in both countries; that there should be a general proportion of all the King's subjects in the societies of staples within the term of five years; that no person outside the staple should ship any wool; and that safeguards for the proper collection of the export duties should be set up. The report concluded by recommending that, if the ancient staple towns should refuse the reception of any of the King's subjects into their society, the Lord Deputy should transfer the staple to such other four towns as he should think fit. This recommendation is of interest, as it shows that the ancient staple towns, by which were clearly meant, not the towns granted staple rights by the patents of a few years before, but the four old mediæval staple towns, were still jealous of their privileges, and that they must therefore have continued to attach some value to their staple rights. The report is signed by Arthur Chichester, Oliver St. John, Lionel Cranfield, William Cockaigne and George Low (*C.S.P. Carew*, 1603-24, pp. 333-4).

This report was referred to Attorney-General Bacon, who agreed with it in the main, with certain reservations. He recommended in the first place that the English towns were to be granted no new staple rights, but were to be merely the receiving centres from the staple towns of Ireland, "without any other novelty." He then proceeded to point out that of the Irish towns mentioned, four, namely, Dublin, Waterford, Cork and Drogheda, were ancient staple towns, that Limerick had recently been made a staple town by a letter from the King, and that Galway, Carrickfergus and Londonderry were not yet erected staples, and suggested that new charters should be granted to all these towns restricting their staple rights to wool, woollen yarn and wool-fells, murkins, sherlings and lambskins. He recommended that the export of all these commodities should be prohibited by a fresh proclamation pending the erection of the staples. He suggested that, if the ancient staple towns refused to fall in with the new arrangements, they should be excluded from the benefit of any *non obstante* licences to export that had been granted to them, and pointed out that all the new charters must contain *non obstante* clauses, as the statutes prohibiting the exportation of wool were still in force. "There should be good care taken," he concludes,

"that the fine of the admittance into the staples company be not great, and that none come in but merchants" (*C.S.P. Carew*, 1603-24, pp. 329-30).

The matter was next referred to Sir James Ley and Richard Hadsor, who expressed the opinion that the staple privileges could be conferred by special letters patent with *non obstante* clauses. They suggested that the privileges granted to aliens and the restrictions imposed on the King's subjects by the old Ordinance of the Staple should not be put into execution, and that all the staple towns, ancient as well as new, should be made to relinquish all their rights to customs and forfeitures to which they were entitled by the statutes of Elizabeth dealing with the exportation of wool (*C.S.P. Carew*, 1603-24, pp. 320-1).

The project by this time seems to have assumed definite shape, and in March 1616-17 the Lords of the Council transmitted their instructions to the Lord Deputy Grandison. After reciting the aim of the scheme as being the prevention of the export of Irish wool to foreign parts, the dispatch states that "upon mature and grave deliberation the business has received a full approbation at this board and is ready for execution." The Lords proceed to refer to the difficulties connected with the ancient staple towns, "which, we hear, are not so conformable and willing to receive the conditions of this new staple as is fit they should be," and outline the method to be adopted to force them into compliance with the Government's requirements. "First cause a proclamation forthwith to be published for restraining generally the exportation of all sorts of wools, wool-fells, murkins, sherlings, lambskins, woollen yarn and flocks, the two first sorts being expressly forbidden by the statutes; and for the rest (the statutes not being so clear) the King's proclamation may supply them; so as all, being once equally prohibited, the King may release it again to the new staple towns by a *non obstante* in their charter, as also by altering the proclamation afterwards, with a saving and exception of the old staples, if their conformity hereafter do deserve it." The dispatch concludes by stating that the new charter will be drawn up with expedition (*C.S.P. Carew*, 1603-24, pp. 325-6). The Attorney-General was instructed to draw up bills for the King's signature "to enable the city of Londonderry and the towns of Drogheda, Carrickfergus and Youghal to be staple towns; and to give the markets of the said towns power to buy and transport all sorts of wool, etc., to the cities of London, Bristol and Chester, towns of Barnstaple, Liverpool and Milthrop (Milford), or some or one of them; and to endow the said city and

towns with the privileges as the merchants of the staple of England heretofore have had or now have " (*C.S.P. Carew*, 1603-24, pp. 327-8). Shortly afterwards the incorporation of Youghal was completed (*C.S.P.I.*, 1615-25, p. 164. The various documents referred to are not arranged in chronological order in the Calendars of State Papers; but, although some of them bear no date, the order in which they are here referred to is probably that in which they were written).

The staple system does not seem to have produced the benefits hoped for by its originators. The next thing we hear about it is a complaint from the Lord President and Council of Munster addressed to the government in Dublin in 1619, wherein it was represented that the restriction of the trade in wool caused by the new regulations was making it impossible for the tenantry to pay their rents. It is stated in this document for the first time that the object of the staple was to encourage the Irish woollen manufacture, but on this matter the Lord President and Council were under a misapprehension, because the development of the home industry was not one of the objects aimed at by the founders of the staple. They complain that one Walter Whyte, factor of the staples, engrossed the wool and transported it to England and to foreign parts for his own private gain, "and thereby overthrows a great number of painful English people and natives here, employed in making frieze mantles, caddowes and other woollen commodities, who are forced to give over that trade, as no wools are brought to their markets, and are so extremely dear in the staple town, and that town so remote as they are (not ?) able to get a living out of them." The factor, it may be explained, was the official charged with the weighing of the wool (Cunningham, *English Industry and Commerce*, Vol. I, p. 313). They further complained that Whyte made use of the King's customs money to finance his dealings in wool. The market for wool, it was alleged, was not as free or as convenient for the vendors as before the staple was erected, and the purchase of wool had become virtually a monopoly. The land, moreover, was being once again diverted from sheep-raising because the English undertakers who went in for the rearing of English sheep were "so worn out and wearied" that they preferred to let the land to the Irish "to be tilled at the fourth sheaf" rather than to produce wool, which they themselves were forbidden to export for the benefit of the staples. The staple, moreover, was injurious to the King's customs, because the staplers did not export English goods to Ireland in exchange for the Irish wool, as had been the practice

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of the old free merchants; and also because of the great increase of smuggling which had arisen (*C.S.P. Carew*, 1603-24, pp. 423-5). The Lord Deputy and Council forwarded this complaint to London with a covering letter wherein they expressed the opinion that "how fair this staple appeared at the first, the proceeding has discovered it to be full of fraud and inconvenience, producing no good, but working contrary to the discouragement of many that prospered in a fair and rich trade now in danger" (*C.S.P. Carew*, 1603-24, p. 425).

The Company of Staplers in Ireland furnished a detailed reply to these complaints. In the first place, they pointed out that a staple was not a new thing, and referred to the four mediæval staple towns. We learn from this document that the only town in which the staple had as yet been erected was Youghal, and the point was made that many of the injustices complained of by the petitioners would cease to exist if the other towns with equal privileges exercised them. They prayed for an inquiry into the allegations made against Whyte, which they said, if proved, amounted to a felony and would overthrow the whole Irish staple if suffered to go unpunished. With regard to the complaint that their operations had proved injurious to the woollen industry, they very properly pointed out that the encouragement of that manufacture was no part of their intended function, which was rather "to hinder the export of wool to foreign parts." They denied, moreover, that any such injurious effects had been produced, but alleged, on the contrary, that one result of the setting up of the staple was that the French and Dutch merchants had taken to exporting "coarse cloths and pieces" instead of the raw wool. To show the increase of the making of cloth, they appealed to the customers' books and asserted that some of them had embarked large capitals in the manufacture and had made some quantities of cloth, with which they had furnished the Lord Deputy himself and others, and, if the works had not been interrupted by complaints and opposition, the inhabitants of those parts might have had the benefit by it (*C.S.P.I.*, 1615-25, pp. 273-4).

Apparently this reply was not considered satisfactory, as a proclamation was issued on the 2nd of June, 1620, providing that every person might lawfully buy wool of the wool-grower to be manufactured in Ireland, though he or they were not of the staple; that every man might be admitted into the company of staplers without paying any fine; that the patent of the staplers should remain in full force; and that no wool or wool-fells should be

shipped either by licence bond or other authority into any other place except by the staple into the authorised ports of England (*Tudor and Stuart Proclamations*, Ireland, No. 231; Caulfield, *Council Book of Corporation of Youghal*, pp. 70-1). A month later, the King instructed St. John to make out patents to Dublin, Drogheda, Cork, Limerick, Galway, Carrickfergus and Londonderry "in the same form as the patent to Youghal," as these towns had hitherto neglected to take out their charters on the pretence that the expense of going to London was too great; "and," it was added, "if any of them be perverse to select others" (*C.S.P.I.*, 1615-25, pp. 291-2). Apparently some of these towns still proved recalcitrant, because we find that patents conferring staple privileges were granted to three other towns shortly afterwards, namely, New Ross, Kinsale and Clare (Ennis) (*Commission on Municipal Corporations*, 1835, App., pp. 72, 314, 559). Ultimately the charters were passed for the staples, but fresh difficulties arose. When the staplers sent their wool to Chester, having duly performed all the legal formalities required, they found that its sale there was prohibited by proclamation (*C.S.P.I.*, 1615-25, p. 336). The Carrickfergus charter was not completed before 1623 (*Commission on Municipal Corporations*, App., p. 746).

It is not to be wondered at that disappointments of this kind should have tempted the exporters of wool to trade in foreign markets, and it would appear that the illegal transportation of wool abroad continued in spite of the steps that had been taken to prevent it. In 1623 the Lord Deputy reported to London that he had instructed the officers of the customs "to suffer no more wool to be exported except to England and Wales and to such ports there as were allowed by former proclamations and directions" (*C.S.P.I.*, 1615-25, p. 402). The Government, however, had only itself to blame for the continued exportation to foreign parts, as it is apparent that the admission of Irish wool into England was impeded in spite of the rights of the staplers to transport it freely implied in their charters. Among the "matters of grace and bounty to be rendered to Ireland" in 1626 was the right "to import wool from the Irish to the English staple towns according to the staplers' charter, paying only the existing impositions" (*C.S.P.I.*, 1625-32, p. 157), and two years later the right was again admitted in reply to a remonstrance from Ireland which shows that it must have been denied in practice (*C.S.P.I.*, 1625-32, p. 331). In 1631 Lord Esmonde wrote to Lord Dorchester to the effect that the people of Ireland were full of complaints of

the impost laid on wool, under which nobody might transport it to England without special warrant from the Lords Justices. "Even the staple towns," he adds, "are now forbidden to sell wool to England" (*C.S.P.I.*, 1625-32, p. 616).

It would appear from these complaints that the staple system was never given a fair trial in spite of the expense which the staple towns had incurred to obtain their privileges. It is quite clear from Strafford's Correspondence that the system, even assuming that it had ever had any active existence, was obsolete in 1633. In that year Strafford wrote to the King seeking permission to give licences for the transport of wool. He gave three reasons in support of his request: first, that it would benefit the customs, as the wool would pay duty four times if transported raw to England and brought back in the form of cloth; second, that there was no means of working it up in Ireland; and third, that it would assist the English clothing manufacture. He then proceeded to state that "to entrust the exportation in the hands of the merchant staplers is a remedy worse than the disease," and added, that "their charter is forfeited by non-usance, and shall never be renewed unto them again by my advice, it being a corporation newly set up by the device of my Lord Grandison, only, as they say here, to put some crowns in his purse." He thought that the licences would bring in some three or four hundred pounds a year—which he was not averse to putting in his own purse—and concluded by seeking an early reply, as he was besieged by the clamour for licences. King Charles's answer was a grant of the right "to give licences for transportation of wools out of Ireland into England only, with restraint of the staplers" (*Strafford's Letters*, Vol. I. p. 202).

After Strafford's time we find no further reference to the Irish merchant staplers. The licence system definitely took the place of the staple system in regulating the export of wool, which was exported after 1633 from a number of ports to which no staple privileges had been granted, such, for example, as Baltimore, Donaghadee, Strangford and Dundalk (*C.S.P.I.*, 1633-47, p. 311). In 1641 a proclamation was issued authorising the transport of wool from several Irish to several English ports, including many ports on both sides of the channel which had never possessed staple privileges (*Tudor and Stuart Proclamations*, Ireland, No. 338), and in the various communications which passed between the King and his Irish subjects in that year respecting grievances, although the export of wool is frequently mentioned, there is no reference made on either side to the staples set up in the previous

reign (*C.S.P.I.*, 1633-47, pp. 317, 318). Shortly after the Restoration, two Cork gentlemen offered to subscribe a large sum of money in return for the exclusive privilege of exporting all Irish wool to England, a privilege which they call a wool-staple, but which was nothing of the kind, being rather a monopoly. The only importance of this proposal for our purpose is that it contains no reference to the Jacobean staples, which must by that time have become forgotten as well as obsolete (*C.S.P.I.*, 1660-2, p. 151). Throughout the reign of Charles II licences were granted for the export of wool without any restriction as to the port of departure (*C.S.P.I.*, 1660-2, pp. 590, 691; 1663-6, pp. 230, 714). In 1675 a proclamation was issued providing that wool should be shipped only from certain ports which, curiously enough, happened to be the ports which possessed staples in the earlier part of the century (*Tudor and Stuart Proclamations*, Ireland, No. 882). It is not, however, legitimate to infer from this coincidence that the staples were still in being; the same ports were probably selected on this occasion for the same reasons which caused them to be selected as suitable points from which to supervise and check the smuggling of wool abroad. In the first year of the eighteenth century, the grand jury of Wexford presented a petition praying that the export of wool should be again permitted from New Ross, and no reference was made to the town's former staple privileges, which would certainly have been mentioned if they were considered to have the slightest bearing on the matter (*Journal of Royal Society of Antiquaries of Ireland*, Vol. XXXI. p. 55). In 1731 the Irish House of Commons appointed a committee to consider the most effectual means of preventing the export of wool, and the report of this body contains not the slightest reference to the staple towns (*Irish Commons Journal*, Vol. IV. p. 46). All the evidence which we can collect seems to point to the same conclusion, namely, that the staple towns had no special privileges or recognition after the vice-royalty of Strafford.

Certain traces of the staples nevertheless lingered on in the municipal as distinguished from the commercial life of Ireland. In 1633 all the rights and revenue of the staplers in Cork were declared to be held in trust for the corporation of the city (*Caulfield Council Book of Cork Corporation*, p. 167). A table of precedence of the corporation of Galway composed in 1643 places the mayor of the staple immediately after the mayor and recorder of the city, and the constables of the staple in front of all the other ex-sheriffs (*Historical MSS. Commission*, Tenth Report, App., Pt. V. p. 493), and King James II's charter to Dublin appoints by

name a mayor and two constables of the staple (Gilbert, *Ancient Records of Dublin*, Vol. I. p. 75). A remarkable revival of the staple took place in Limerick in 1824, when, by an order of the Privy Council, thirty-two members of the guild of the staple were named, of whom several were freemen of the city. The sole object of thus reviving the staplers was to enable them to send representatives to the common council of the city, but the staplers were confronted by certain legal difficulties in enforcing this claim to representation, and they lapsed into further obsolescence without holding a single meeting of their number (*Commission on Municipal Corporations*, 1835, App., pp. 348-9).

In Dublin the guild of merchants, which was the leading guild of the city, continued till last century to elect a mayor and constables of the staple every year. These officers had no duties to perform. There used to exist in the town clerk's office books of the staple in which statutes staple were entered, and in the eighteenth century searches used to be made in these books for judgments affecting property in the city (*Commission on Municipal Corporations*, 1835, Report on Dublin, p. 273). In Drogheda the mayor of the staple was created a justice of the peace *ex officio* in 1697, and in 1835 there still remained in existence a mayor and two constables of the staple. The mayor of the city of one year was nominated mayor of the staple in the next, and the sheriffs of one year became constables of the staple in the next. The mayor of the staple of one year was appointed master of the guild of merchants in the year following, and the constables of the staple wardens of the guild of merchants in the same manner. These offices had become merely nominal, no duties being performed, although the mayor of the staple continued to be a justice of the peace under the charter of William III (*Commission on Municipal Corporations*, App., p. 818). The procedure in Drogheda is interesting as showing that the staplers and the guild of merchants were not identical, as might have been inferred from the practice in Dublin, however close the connection between the two bodies may have been (Gross, *The Gild Merchants*, Vol. I. p. 147). In Dublin the relation between the two bodies seems to have been that the staplers constituted a sort of senior branch or inner ring of the guild of merchants. Dr. Gross, who studied the matter carefully, arrived at the conclusion that "the staple was evidently regulated by the guild though distinct from the latter. The staple may be regarded as a section of the guild merchant consisting of the wealthier members" (*The Gild Merchant*, Vol. II. p. 85). As late as 1844 the staplers of Drogheda

maintained the form of a separate corporation, and continued to elect their annual officers (D'Alton, *History of Drogheda*, p. 167). In Youghal in 1835 the ex-mayor was called the mayor of the staple and the ex-bailiffs constables of the staple, but these officers had no duties to perform, and there was a class of freemen who were not members of the corporation, and were called "freemen of trade" (*Commission on Municipal Corporations*, 1835, App., p. 107).

These surviving traces of the staple organisation do not disprove our assertion that the merchant staplers were a thing of the past before the middle of the seventeenth century. Municipal conservatism frequently preserves the forms of things of which the reality has long since vanished. Thus, the guilds continued to exist for the purposes of municipal representation long after they had ceased to perform their original economic function. All the evidence seems to show that the Irish staple organisation lasted but a very few years, if, indeed, it was ever given a chance of existing at all. The probability is that, like so many other experiments that have been tried in Ireland, it was never allowed to operate, but was replaced by something else before it had time either to be a failure or a success. The staples aimed at no object which could not be attained equally well, if not better, by other means. The prevention of the export of wool abroad was a matter for the general machinery employed to deal with smuggling, and the collection of the customs duties on the legitimate export could be ensured by the licence system as well as by the staples. The development of the woollen manufacture was no part of the objects aimed at by the founders of the staple, and the staple must not, therefore, be blamed for the failure of that industry to develop. (Dr. Hugh O'Grady seems to labour under the mistaken impression that the staples were designed to foster the woollen manufacture: *Strafford and Ireland*, pp. 319-21.) One cannot help wondering if the most potent motive influencing those who founded the staple was not that referred to by Lord Strafford, namely, the desire to put something in their own pockets. The fact certainly remains that the enthusiasm of the Government in the matter seems to have waned as soon as the patents appointing the staple towns were taken out, and, presumably, the appropriate fees paid. The staples were at all events designed in the first place with a view to the collection of the revenue rather than to the encouragement of any particular commercial policy for the benefit of the community at large; they were, as Dr. Cunningham has said of their mediæval prototype, "primarily a fiscal organ

though also subserving trading purposes" (*English Industry and Commerce*, Vol. I. p. 416).

It was not only in the objects which they aimed at attaining that the new Irish staples remained true to their mediæval models. The old system of government by a mayor and constables and the method of weighing the wool and collecting the custom were all reproduced. The Irish staplers of the seventeenth century, moreover, possessed a feature in which, according to Dr. Gross (*The Gild Merchant*, p. 146), they had differed from the English even in the Middle Ages, namely, that the organisation in each town was a distinct corporation with an individuality and a life of its own, whereas in England there was but the one corporation for the whole country. The Jacobean revival was, moreover, confined to Ireland; nothing corresponding took place in England. The question of the staplers' privileges came before Parliament a couple of times in the reign of James I, but no action was taken with regard to them (*Historical MSS. Commission*, Third Report, App., pp. 15-25; *Commons Journal*, Vol. I. p. 505; *Lords Journal*, Vol. III. p. 174). In 1616 a proclamation was issued removing the staples from Middleburg, Bruges and Bergen-op-Zoom, where it had been placed by Queen Elizabeth, and appointing a number of English towns, both seaport and inland, as staple towns (*Tudor and Stuart Proclamations*, No. 1197). But this measure, as appears from the recital, was directed in the interests of the clothing industry, and aimed at preventing the export of English wool abroad, and was in no sense a revival of the old staple system, which dealt primarily with the export trade. The Irish revival which we have described in this paper was in direct line with the old mediæval staple system, the principal innovation being that the ports abroad to which the wool was to be transhipped from the staple towns were situated not on the Continent but in England.

GEORGE O'BRIEN

THE CONSUMPTION OF TOBACCO SINCE 1600

BEFORE the beginning of the eighteenth century there does not seem to have been any thought of collecting the statistics of tobacco imports and consumption either for publication or reference. They were sometimes given in answer to a question in the House of Commons, but were not printed, being bound up with the miscellaneous papers of the session in the Commons' library, and were destroyed in the fire of 1834.¹

Sometimes, when the answer has been preserved in the Journal or some contemporary account, it is not of very great use, as only the money value of the import is given. Moreover, not only were the accounts not well kept, but the assessment of money value was quite arbitrary. In practice it seems to have been adjusted to bring in the income desired from the tax. In the Book of Rates two different values for tobacco are given, 20s. a pound and 6s. 8d., according as the rate is for impost or subsidy. Spanish and Virginian tobacco, the first five times the value of the second, were given the same rate.²

Spain and France may have been the first European countries to use tobacco, but England was the first to smoke. The habit was introduced by sailors and travellers returning from Virginia, and spread rapidly. By 1625 tobacco seems to have been universally used in England, irrespective of class, age or sex.

The first official figures of importation are for the year 1602, in which year 16,128 pounds of tobacco entered the port of London.³ From one-half to two-thirds of the imports entered through the port of London, so we may assume that the annual consumption of tobacco in England at the beginning of the century was not more than 25,000 pounds. In 1610, Spanish tobacco to the value of £60,000 is said to have been imported. At prevailing prices this probably represented from 50,000 to 75,000 pounds weight, according as to whether it did or did not include the duty. Tobacco was not cheap. In 1615 "the greatest part" was sold "for ten times the value of pepper, and the best

¹ Select Committee on Library, etc., 1834.

² *Rates of Marchandizes.*

³ *State Papers, Domestic*, James I, Vol. IX, No. 1.

of it weight for weight with silver.”¹ In a debate in the House of Commons in 1614 a member complains that goods are sent out of England to be exchanged for tobacco “. . . infinitely to the prejudice of the whole commonwealth. . . . Many Divines smell of Tobacco. . . . Poore men spend four pence of their days wages at night in smoke.”

For the next seven years our figures are official. In 1621 the Lord Treasurer informed the Virginia Company that the “medium of the quantity of tobacco brought in these last seven years ending in Michaelmas 1621” amounted to “142,085 $\frac{1}{2}$ ” pounds.² In addition to this official figure, we have also the statement that England spends £60,000 a year on Spanish tobacco.³ The price at this time being from 8s. to 10s. a pound, exclusive of the duty,⁴ this would indicate an importation of 120,000 to 150,000 pounds, a quantity not inconsistent with the figure given by the Lord Treasurer and the statistics available of exports from Virginia.

The demand for tobacco grew rapidly. Statistics of exports of tobacco from Virginia for the early years of the seventeenth century have been collected in America, and show a rapid increase of supply⁵:—

1619	20,000 pounds
1620	40,000 ”
1621	55,000 ”
1622	60,000 ”
—	—
1626	500,000 ”
—	—
1629	1,500,000 ”
1630	1,500,000 ”
1631	1,300,000 ”

These figures exaggerate the rapidity of the increase of demand after 1620, as to a great extent they indicate the displacement of the expensive Spanish tobacco by the cheaper Virginian. The cultivation of tobacco even in small patches did

¹ According to Rogers, *History of Agriculture and Prices*, the price of pepper ran from 2s. to 2s. 6d. the pound at this time, so that at ten times that value tobacco would sell for 20s. to 25s. the pound. That tobacco was sold for its weight in silver is verified by Aubrey, who says: “I have heard some of my old yeoman neighbors say . . . they culled out their biggest shillings to lay in the scales against tobacco,” Aubrey, *Lives*, II, 181, writing in 1682. The shillings of the time varied from fifty-six to seventy to the pound avoirdupois. See also “C.T.,” p. 3.

² *Virginia Company Proceedings*, II, 199.

³ *Commons Journals*, 17th April, 1621.

⁴ *Virginia Company Proceedings*, I, 34.

⁵ Arnold, p. 11.

not begin among the English settlers in Virginia before 1612. In that year John Rolfe first attempted its cultivation. His experiment was so successful, and the demand for his product so great, that by 1616 tobacco had become one of the staple crops of the colony. In 1617 the plant was being cultivated in the streets and market-place of Jamestown, such was the demand for ground for growing it.¹

In 1624 James agreed, at the instance of the London Company of Virginia,² to limit the importation of Spanish tobacco to 60,000 pounds per annum, and in the following year issued a proclamation prohibiting the importation of any tobacco but that grown in Virginia and the Somers Islands.³ This was renewed a year later by Charles,⁴ and as at this time Spain and England were once more on bad terms, it is likely that the prohibition was at least partially enforced. Later, in 1626, all commerce with Spain was forbidden. In 1627 Charles issued another proclamation; "... Spanish tobacco is so much appreciated that it is smuggled and the Revenue from it lost. . . . In future fifty thousand weight of Spanish Tobacco may be imported by the Commissioner as Royal Merchandise."⁵

Simultaneously with the increased importations of plantation tobacco came the re-exportation of tobacco to Europe, and after 1625 allowance has to be made for tobacco re-shipped from London. Indeed some exportation must have taken place even earlier, though probably in very small quantities. In 1610 the Venetian ambassador at Constantinople wrote to his home government: "The Pasha caused to be burned before his tent a keg of tobacco, a certain herb which comes as a medicine from England, and which has formerly been used here but is now prohibited. . . ." ⁶

For the year 1628 someone has left us an estimate of the revenue obtainable from tobacco, which gives round figures for the annual importation at the time: 50,000 pounds of Spanish tobacco and 350,000 of Virginian.⁷ For 1632 and 1633 we have a record of the amount the people of Virginia thought England ought to consume. Charles had dallied with the idea of a tobacco purchase monopoly, and the Governor of Virginia suggested that the privilege should be vested in Royal Commissioners, who should be authorised to purchase 600,000 pounds annually, but

¹ Smith, *Captain John*, p. 535.

² Bruce, I, 216-18, 270.

³ The Bermudas.

⁴ 1624-25, 2nd March, and 1625, 9th April.

⁵ 1626-27, 17th Feb., *B.L.*, 1505.

⁶ *C.S.P. (Venetian)*, 1607-10, p. 505.

⁷ *C.S.P. (Domestic)*, Addenda, 1625-49, p. 315.

nothing further was done about it. In 1634 Lord Goring and associates offered to purchase 600,000 pounds annually, but the price offered, sixpence the pound, was unsatisfactory to the colonial planters, and no agreement was reached.

In addition to the tobacco imported from Virginia, other English colonies and the Spanish dominions, a certain amount was grown in England. In 1619 the English production is said to have been sufficient to depress considerably the price of imported Virginia leaf, and James was prevailed upon by the London Company of Virginia to prohibit by proclamation its cultivation at home. In order that this proclamation should be enforced, the company employed an informer to assist the authorities in the search for and destruction of English-grown tobacco.¹

In the next few years almost a series of proclamations was made by James I and Charles I, but seemingly with little effect. In 1652 the Commonwealth passed a law against the cultivation in England, but found it impossible of enforcement, although they tried for three successive years. In Gloucestershire the attempt aroused armed resistance, and in 1654 the commissioners reported to London that they "durst not destroy any [home-grown tobacco] about Winchcomb, as the people raised 300 armed horse and foot to fight the troops . . . saying they were bred to the trade and if they lose it they will lose their lives."² This was followed by a petition to the Protector from the growers begging "toleration for the year's crop" and promising not to plant in future, "though that has been our trade for forty years." Their petition was granted for the year, the growers to pay excise duty to the Commonwealth.³ Finally, in 1661 an Act was passed prohibiting cultivation. Gloucester County continued to grow some tobacco, but not with impunity.⁴

For four years, 1637 to 1640, the imports of tobacco to the port of London were ⁵ :—

1637.	Total	1,500,000 pounds, including	60,000 pounds Spanish.
1638.	"	3,100,000 "	" 93,000 " "
1639.	"	1,400,000 "	" 110,000 " "
1640.	"	1,300,000 "	" 6,000 " "

These are the official figures for total importation, as all ships with tobacco had to come to London. The higher figures for

¹ Treasury Committee, 1923 and *Virginia Company, Proceedings*.

² *C.S.P. (Domestic)*, 1654, pp. 229-30.

³ *C.S.P. (Domestic)*, 1654, pp. 229 *et seq.*

⁴ Treasury Committee, 1923. ⁵ Hardwicke MSS., 35865 ff., 248.

1638 may be partially due to the presence of Sir John Pennington with a man-of-war in the Channel, with instructions to take bond of masters to take their ships to London.

Here we have a gap of nearly fifty years. In the interval tobacco importations to London had increased tenfold, tobacco brought into that port for five years amounting to ¹ :—

1689	14,392,635 pounds
1690	12,638,027 „
1691	14,830,503 „
1692	13,425,464 „
1693	19,866,048 „

Writing about the same time (1688–90), Aubrey says: “Mr. Michael Weekes of the Royall Society assures me, out of the custom house books that the customs of tobacco over all England is £400,000 per annum.”² This would indicate a net importation of some 16,000,000 pounds, Probably about half this would be nearer the truth.

For the period from 1689 to 1709, our figures are again official. From statistics collected by the customs, Davenant places the average annual consumption of tobacco in England at 11,300,000 pounds, out of a total average yearly importation of some 28,000,000 pounds—or two-fifths of the total.³

There is a decided slump in the twenty years from 1709 to 1731, in which latter year 15,787,153 pounds of tobacco entered the port of London, but for the same year the total importation is set roundly at “60,000 hogsheads, one with another 600 pounds weight,” making a total of 36,000,000 pounds.⁴ This is more in keeping with Davenant’s estimate, but as the writer was employing it to demonstrate the value of the plantation trade to England, it probably errs on the side of over-statement.

For 1732 we have the net revenue of the customs given in round numbers, £160,000; the gross revenue was £740,000.⁵ With duty at 6½*d.* this represents an importation of about 5,200,000 pounds, or about one-fifth of the total importation of nearly 30,000,000 pounds. This low figure for home consumption is explained by the prevalence of fraud and smuggling.

Our next lot of figures are “From the English plantations

¹ *A Calculate of the Tobacco Imported.*

² Aubrey, II, 181.

³ Davenant, *Works*, V, 428.

⁴ Macpherson, III, 163.

⁵ Dowell, IV, 253.

in American into England, Christmas 1736 to Christmas 1743¹:—

To Christmas 1737	.	.	.	.	.	50,196,181 pounds
„ 1738	.	.	.	.	.	40,103,449 „
„ 1739	.	.	.	.	.	46,654,453 „
„ 1740	.	.	.	.	.	36,108,471 „
„ 1741	.	.	.	.	.	59,080,618 „
„ 1742	.	.	.	.	.	43,459,350 „
„ 1743	.	.	.	.	.	56,765,966 „
						<hr/>
						332,378,488 „
Medium	.	.	.	.	.	47,482,641 „

From the same source we have, for the five years 1738 to 1743, the total average yearly importation from all countries—48,500,000 pounds, of which amount approximately one-sixth, or 6,300,000 pounds, was retained for consumption in England. For the same period, as seen from the table just given, the amount from the English plantations in America averaged 48,400,000 pounds, leaving about 100,000 pounds a year to be accounted for by imports from all other countries.²

For the three years 1744 to 1746 inclusive, our figures are “from the custom house books”³:—

Total import	.	.	.	.	.	120,000,000 pounds
Re-exported	.	.	.	.	.	99,000,000 „
						<hr/>
Retained for home consumption	.	.	.	.	.	21,000,000 „

or 7,000,000 pounds per year. About this time many pamphlets were published giving figures for total imports as high as 50,000,000 pounds, but these were published by people with theses to prove (it was the period of the much-hated Excise Bill of Walpole), and, as Macpherson wisely remarks, “are to be read with caution, like all others published for such particular ends.”⁴

Here we have another gap of fifteen years. In the eight years 1763 to 1770 inclusive, an average of 66,780 hogsheads was exported from the colonies to England. In the last of these years the importation was 96,000 hogsheads, of which 14,000 were retained for home consumption, which at 750 pounds the hogshead would amount to some 10,000,000 pounds, but this year was above the average.⁵

The period from 1775 to 1786 includes the War of Inde-

¹ Liverpool MSS., B.M. 38330, ff. 278.

² *Ibid.*

³ Macpherson, III, 254.

⁴ *Ibid.*, 164-5.

⁵ *Southern Fertiliser Co. Position, etc.*, p. 18.

pendence. The official Custom House figures, together with the differences between them, are ¹ :—

	Imports (pounds).	Exports (pounds).	Differences (pounds).
1775	101,800,000	74,200,000	27,600,000
1776	14,700,000	40,000,000	—25,500,000
1777	2,400,000	8,400,000	— 6,000,000
1778	12,000,000	4,400,000	7,600,000
1779	17,200,000	6,200,000	11,000,000
1780	17,400,000	6,000,000	11,400,000
1781	13,300,000	5,700,000	7,600,000
1782	9,800,000	3,500,000	6,300,000
			40,000,000

The minus quantities, in the last column of the table, are explained by the lag, between importation and consumption, of three to four years; the average quantity in the warehouses at any one time amounts to approximately three years' supply.

From 1786 to the present time the official Custom House figures of home consumption have been preserved. These are given up to 1825 for Great Britain alone in Table A, and after 1815 for the United Kingdom in Table B. The figures for Ireland for the first twenty-five years are available in two sets, which do not agree, and which exhibit such divergences and fluctuations that it has been considered best to omit them altogether. On the other hand, the most complete tables for home consumption after 1815 are for the United Kingdom, and, as the imports and exports between the three countries are not known, they are the more reliable.

Smoking, as a social habit, has had its ups and downs. Assuming a population of 5,800,000 in 1700, the *per capita* ² consumption works out at just under two pounds a year. In 1786 the *per capita* consumption was less than half this amount (Table A). In the course of the eighteenth century smoking went out of favour, and snuff took its place to a very great extent, with a resulting diminution in the consumption of tobacco, for the snuffer uses much smaller quantities of the weed than the smoker; the stalk is used in the manufacture of snuff and many foreign substances are introduced in quantities. By 1700 smoking was falling into disfavour in the upper circles of society, and in 1773 Johnson declared that it had completely gone out. But among the working class and a few other groups the habit persisted, and in 1732, when Walpole proposed, in his

¹ Macpherson, IV, 37.

² Gonner, *Jour. R. Stat. Soc.*, LXXVI, 261.

Excise Bill, the extension of the Excise to tobacco, it aroused such extensive opposition that he was forced to abandon it.

Smoking came in again from the army and the universities, where it had never completely died out. The cigar first broke through the defences of the enemies of smoking, and its introduction into England may be charged to the Peninsular War. Wellington made a last stand against the spreading habit in 1845, and issued an order against smoking,¹ but for once met with defeat.

But the smokers' victory was not overwhelming, and some strongholds never gave in. Victoria detested smoking, and never permitted it about the Court. Even where the cigar was accepted, the pipe remained under the ban. Under no conditions was smoking permitted in the presence of ladies. Only in 1868 was smoking permitted on the railways, when special compartments were provided for smokers by the Railway Bill of that year.²

The Peninsular War brought in the cigar, the Crimean War introduced the cigarette. Of convenient size for a brief smoke, not requiring the paraphernalia necessary to the pipe, nor leaving behind the strong odour of the pipe or cigar, it insidiously made its way everywhere, upstairs and downstairs, and sometimes even in my lady's chamber.

There are no official figures for the consumption of cigarettes in England, but if we assume that the increasing popularity of the cigarette here has paralleled that in the United States, the quantity is enormous. In the nineties the factories of the United States used some 15,000,000 pounds of tobacco annually in the manufacture of cigarettes. In 1900 it had reached 20,000,000; in 1912, 50,000,000; in 1916, 100,000,000; and in 1923, 202,000,000 pounds.³ A writer in the Tobacco Number of *The Times*, 20th Oct., 1925, estimates that 70 per cent. of the tobacco imported is manufactured into cigarettes. This would make the consumption of cigarettes quite as great proportionately in England as in America.⁴

¹ "The Commander in Chief has been informed that the practice of smoking by the use of pipes, cigars or cheroots has become prevalent among the officers of the army, which is not only in itself a species of intoxication occasioned by the fumes of tobacco, but undoubtedly occasions drinking and tipping . . . and he entreats officers commanding regiments to prevent smoking in the mess-rooms . . . and to discourage the practice among officers of junior rank," Penn, p. 89.

² 31 & 32 Vict., c. 119, s. 20.

³ *U.S. Stat. Abstract*, 1924, p. 351.

⁴ An inquiry was made of the Imperial Tobacco Company, but they found themselves unable to give the information, and expressed the opinion that it was not information that one might reasonably expect a manufacturer to give.

Throughout the first half of the nineteenth century the *per capita* consumption of tobacco remained fairly constant, fluctuating about one pound per annum. In 1885 it reached 1.3 pounds, and then began to rise slowly. By 1900 it had reached two pounds, and increased but slightly to 1914. The jump to three pounds *per capita* occurred in 1919. It may seem strange that this sudden increase is a post-war rather than a war-time occurrence, but it must be remembered that these figures are only for tobacco on which duty has been paid. Tobacco is shipped free of duty to ships stores, the navy and expeditionary forces. The excess of the amount of tobacco released for the fighting forces over the normal peace-time amount was 37,000,000 pounds in 1917 and 43,000,000 pounds in 1918. At this estimate the peak of consumption was reached in 1917-18, at somewhere about 3.4 pounds *per capita*. It is evident that there must have been a great increase in consumption at home, as well as among the expeditionary forces, as otherwise the figure for home consumption must have dropped considerably on the withdrawal of so many men for service abroad.

An attempt was made to work out the correlation, if any, between the consumption of tobacco and the trade cycle. For this purpose Beveridge's figures for unemployment¹ 1860 to 1900 were taken and compared with figures showing the deviation of tobacco consumption each year from a nine-year mean. The period chosen was a good one for this purpose, as the rates of duty remained fairly constant throughout. (See Table B.)

For the forty-year period the correlation works out at $r = -.31$, but it is evident on inspection that there is a slight lag in the figures for tobacco. Moving this whole set of figures up a year and extracting r gives us $r = -.48$, a somewhat higher correlation than inspection of the figures had led us to expect. The quantitative fluctuation is not great; an increase in unemployment from 2 to 10 per cent. only decreases the consumption of tobacco by two million pounds, or something over 1 per cent., and it must be remembered that we know nothing of the fluctuations in dealers' stocks. On the whole the demand for tobacco would not seem to be very elastic.

These statistics seem to be as complete as possible for the present. Some of the figures are official, some merely estimates. The guesses of contemporary writers with a thesis to prove have been neglected; generally they are absurd. The question

¹ Beveridge, percentage unemployed : selected trades.

now arises, To what extent do these statistics represent the amount of tobacco actually consumed?

Three things have to be considered: errors in accounting, changes of weight in manufacture, and frauds, including smuggling, underweighing, adulteration and so on. Errors in accounting will be dealt with under the head of fraud, except for the mention of them already made in reference to the earliest period.

The allowance made for change of weight in the process of manufacture varies with different authorities. An average estimate, which is borne out by evidence given before various committees, is that of Axon, who puts it at 30 per cent. increase due to the absorption of moisture after importation.¹ Some tobaccos contain a large percentage of flavouring or sweetening material, and as the law since 1863 requires that such tobaccos be manufactured in bond and the duty paid on the finished product, their weight is included in statistics given.² We shall probably be safe in assuming that the statistics given come within 25 per cent. of the weight of the finished product that reaches the consumer. The increase of weight is not greatly set off by the waste of unused parts of the tobacco in manufacture.

With these allowances we can assume that our figures for the last seventy-five years or so are reasonably accurate, but before this a variety of factors, such as adulteration, smuggling and various forms of fraud, render the degree of accuracy a matter for doubt.

Throughout the whole history of the tobacco trade smuggling plays a prominent part. Charles' proclamation of 1627 dealing with the smuggling of Spanish tobacco has already been mentioned. In 1660 the first reference occurs in the Commons Journals: "The House being informed that great quantities of Spanish tobacco lately imported have been landed and secretly conveyed away by several persons without due entry or payment of customs or excise. . . . That the Sergeant-at-Arms, himself or his deputy, do forthwith seize, inventory and secure the said tobaccos wherever they shall be found. . . ." ³

Throughout the seventeenth century smuggling was a modest and unadvertised profession. The smuggler went his quiet way undisturbed by troublesome Government officials. Only in 1698 was the first force of customs men organised. These were

¹ Axon, *Jour. R. Stat. Soc.*, XXXV, 339.

² The figures given in the tables include manufactured tobacco, but as the quantity averages something under 2 per cent. of the total quantity of tobacco imported, it is quite negligible, under 0.03 pound *per capita* per annum.

³ *Commons Journals*, 1660, 6th Sept., VIII, 154.

the "riding officers" of the south coast. Three hundred of them were installed to check the export of wool and incidentally to repress all smuggling.¹

Large quantities of tobacco were at this time brought from the colonies in bulk and smuggled into England, so that, although there was considerable waste in this method of shipping, it depressed the price of tobacco, sometimes to little over the amount of the duty. It was brought in small ships into the out-ports, creeks and estuaries along the coast and peddled from town to town on packhorses. The practice prevailed throughout the latter half of the seventeenth century, and the demand of whole districts is said to have been supplied by it.²

Throughout the first half of the next century smuggling was particularly rife. The smugglers had the sympathy of the local populations, indeed were of it. The King's men gave very little trouble, and the duty was simply ignored. When smuggling did begin to meet with opposition, many of the smugglers took to the use of force, and in some cases gangs of ruffians successfully resisted all efforts of the officers and even terrorised the countryside. In Sussex and Kent the smugglers were so powerful that magistrates feared to convict offenders brought before them.³

At sea, especially in the latter half of the century, smugglers resorted to larger ships, heavily manned and armed, and faster and more powerful than the revenue's. Smuggling continued on a grand scale, and sufficient quantities of tobacco were brought into the country duty free to depress the price below the amount of the duty. Smuggled tobacco was openly on sale in London for two-thirds, and in the country for one-half the price at which legally imported tobacco could be sold. Before a Royal Commission the amount smuggled was variously estimated at one-half, twice, and six times the amount legally imported. This Commission reported: "It is the opinion of the Commissioners of the Excise, from which we cannot dissent, that the Excise duties alone would, if smuggling could be prevented, increase the revenue three times."⁴

In addition to smuggling a method existed for bringing in tobacco without paying duty. This was first brought to the attention of the House of Commons in 1721,⁵ and there is no doubt that it had been quite extensively employed in all parts

¹ Shore, p. 142.

² *Essay on Bulk Tobacco.*

³ *Parliamentary Reports*, I, 605.

⁴ *Reports, Commissioners*, 1783, XI, 228.

⁵ *Commons Journals*, XIX, 674.

of Great Britain. In 1722 the House received a number of petitions, setting forth “. . . that since the union with Scotland vast quantities of Tobacco have been imported thither from Virginia and Maryland. Great part whereof has been brought into that Part of Great Britain called England and sold at such Prices as to give just Ground to believe that the several Duties payable thereon have not been duly collected.”¹

In January 1723 a Committee reported on these petitions. Evidence was given before it to show that English merchants were being undersold in London by tobacco imported from Scotland; although the lowest price for which it could be imported, duty paid, was 7*d.* the pound, duty being 5½*d.* with the discount, this Scotch tobacco sold for 6*d.* and even 5*d.*

The merchants of the north were not silent; they pointed out that they were losing money, and explained to the committee that “. . . the reason Tobacco from North Britain sold at such low prices is That one Robert Cowan, who sold almost all the low-priced Tobacco that was sold in London, contracted in Glasgow for Tobacco at 7*d.* and 7½*d.* per pound, and sold it at 6*d.* and 6½*d.*, but that the said Cowen is since become insolvent.”²

The Customs statistics are more elucidating than the Scotchmen. On the following page of the report we find :—

“Imports;

“Glasgow, Mar. 1721–22

7,344 hogsheads, or 3,303,316 pounds.”

“Exports;

“Glasgow, May 1721–22

2,669 hogsheads, or 1,721,854 pounds.”

We are not concerned with quantities, but with the average weight of hogsheads on importation and on exportation. The average weight on import is approximately 450 pounds per hogshead, on export the average weight is 750 pounds.

At the port of entry the land-waiter was in collusion with the importer, and recorded weights as much as he dared below the actual weight. On this quantity, as recorded in the land-waiter's book, duty was paid. By exporting to foreign parts nearly as much as he entered, the merchant received his drawback or cancelled his bonds, and so received the whole of the excess duty-free. Of this remainder the greater part found its way to England. Any price over the cost of transportation was sheer profit.

Before the Union the consumption of tobacco in Scotland was over two million pounds annually, and was probably

¹ *Commons Journals*, 1722, XX, 63, 64.

² *Commons Journals*, XX, 104.

increased by 1722, yet it appears that Scotland, in three years, "besides what she consumed at home, supplied England with nearly four million pounds more of tobacco than that which she paid duty for."¹

Further investigations by the customs authorities revealed that the Scots were not the only offenders in this way; the system flourished in England also, and reporting the following year the committee were able to educe a number of examples. Moreover, a further system of fraud by misstatement of weight was found to be flourishing. Drawbacks were paid to the full amount of the duty to enable the English merchant to compete in the foreign market. The tobacco to be exported was weighed and inspected by "searchers." But the searchers, like the tide-waiters, were approachable, and if not could frequently be deceived, so that the possibility of fraud was doubled. The committee found examples of damaged tobacco, adulterated stuffs, tobacco weighted with rolls of lead, sand, syrups and what not, which had claimed and received the full drawback. The evidence suggests that there must have been an average understatement of some 30 per cent. on import, and an over-statement of 20 to 25 per cent. on export. In this way "honest" merchants competed with the smugglers.²

Adulteration, while it cannot be said to increase the amount of tobacco itself, does increase the bulk of the total mixture, and affects the quantity of tobacco consumed by the substitution, so that some discussion of it is pertinent here. As early as 1615 a writer on tobacco says of the imported Spanish: "... it is hard to find one pound weight in five hundred that is not sophisticate. The blacke colour which it hath and for which our Shoppe-keepers praise it is Artificiall, yea all tobacco (Saint Domingo tobacco excepted) ... is noynted and slobbered over with a kind of iuyce or syrope," and names a number of adulterants used: salt water, "dregges of sugar," black honey, Guiana pepper, "leeze of wine," a red berry called "Anotto" and other berries.³

In 1716 a committee report was laid before the House of Commons dealing with the abuses of the tobacco trade. It was shown before the committee that great quantities of leaves of walnut and chestnut trees and hop leaves were annually cut and stripped, to be mixed with tobacco, or sold unmixed as tobacco. One John Sheffield had made this his business, and sold his sham

¹ *Commons Journals*, XX, 107-8.

² *Reports, Commissioners*, 1733, I, Appendix 26.

³ C. T., *An Advice how to Plant Tobacco*, etc., p. 3.

tobacco to the trade. He had occupation for six men, and the estimated output of his establishment was 20 cwt. per week. The product was generally mixed with tobacco and sold retail about twelve pence the pound.¹

For this earlier period it is not possible to get definite information about adulteration. Until the middle of the nineteenth century chemical analysis was very uncertain, and if the adulterant was not noticeable to the unaided eye, one might adulterate with impunity. Even the detection of foreign material, such as leaves of trees or sand, was difficult. Snuff was particularly liable to adulteration, and was always mixed with earths, alum or concoctions to make it more pungent. Only by grating his own supply could the snuff-taker be sure of getting it pure. It is probably safe to assume that adulteration was general throughout the eighteenth and early part of the nineteenth centuries.

The Excise Survey, introduced in 1789, acted as a deterrent for some fifty years, and kept adulteration within bounds. The manufacturer would not display quantities of adulterant unnecessarily when an Excise man might be about at any time, and was probably cautious in its use.

By the Act of 1821² the only ingredient permitted was water, or water tinged with colour. But the Act that abolished the Excise Survey in 1840,³ abolished these restrictions and forbade only "leaves, herbs or plants, cut, coloured, stained or manufactured to resemble tobacco." This application of *laissez-faire* did not last long. Manufacturers quickly took advantage of the new privilege and the removal of the spying Exciseman. Even the forbidden adulterants were used more freely. The effect on the revenue was immediate, and two years were enough to convince the Government of its mistake and to bring back the old restrictions.⁴ With the establishment of the laboratory in Somerset House in 1843, the Government was able to pass such a law with some prospect of its enforcement. Prosecutions were numerous at first, but eventually had the desired effect, and by 1850 adulteration was a thing relatively unimportant.⁵

Unfortunately the Government made one slip that played into the hands of the smugglers. It forgot that some people liked sweetened and flavoured tobacco. The demand remained, and smuggling received an impetus. Not until 1863 was this mistake corrected, when Gladstone provided for the manufacture in bond of sweetened Cavendish and Negrohead.

¹ *Commons Journals*, XVIII, 410-421.

² 1 & 2 Geo. IV, c. 109, s. 14.

³ 3 & 4 Vict., c. 3, s. 18.

⁴ Dowell, 261; 5 & 6 Vict., c. 90, s. 19.

⁵ *Accounts and Papers*, 1844, XII; Dowell, p. 262.

Except in small quantities, smuggling too has become a thing of the past. At the close of the Napoleonic Wars the Government was able to give its attention to the restriction of smuggling. New methods of communication made success possible ashore, and the Navy took over the work afloat.¹ In 1857 the Commissioners of the Customs reported "... smuggling has greatly diminished, and the public sentiments with regard to it have undergone a very considerable change. ... Smuggling proper is now almost entirely confined to tobacco, spirits and watches. ..."²

A certain quantity of tobacco is still smuggled ashore from ships in ports, chiefly by sailors and stewards, and within the last twenty years the fishing fleets have been responsible for running some, which they have occasionally been able to buy from small foreign vessels which visit them for that purpose. The total quantity must be inconsiderable, perhaps a hundred thousand pounds, but scarcely more.³

The cultivation of tobacco has been permitted in England since 1910, when the Act of 1661 was repealed, but the quantities produced have seldom exceeded 50,000 pounds a year, and the total production for the United Kingdom has never reached 200,000 pounds; the peak of production was in 1915, when 187,942 pounds were charged with duty. For 1923 the amount produced was just over 20,000 pounds.⁴

Summarising the more reliable of the statistics for the earlier period, the rapidity with which the use of tobacco spread after its first introduction is shown :—

Year.	Total Imports (pounds).	Home Consumption (pounds).
1602	16,000 (London)	—
1610	60,000	—
1614-1621	—	140,000 (av.)
1628	—	400,000
1632-1634	—	600,000 (av.)
1637-1640	1,800,000 (av.)	—
1689-1693	15,000,000 (London, av.)	—
1699-1709	28,000,000 (av.)	11,300,000 (av.)
1731	15,800,000 (London)	—
1732	32,000,000	5,200,000
1737-1743	47,500,000 (av.)	—
1744-1746	40,000,000 (av.)	7,000,000 (av.)
1762-1770	50,000,000 (av.)	—
1770	70,000,000	10,000,000
1775	101,800,000	27,000,000
1775-1782	23,600,000	5,000,000 (av.)
1786	—	6,800,000

¹ Shore, Part III, Chapters V to VII.

² *Customs Commissioners' First Report*, 1857, p. 39.

³ *Reports, Commissioners of Customs*, 1906 and succeeding years.

⁴ *Treasury Committee*, 1923.

The second column of the table on p. 71 brings out the apparent drop in home consumption between 1700 and 1770. The figures for 1732 and 1744 to 1746 are indicative of the great amount of smuggling and fraud at that time. The exceptionally high figure for 1775 is explained by the fear of a shortage due to the political situation. It will be remembered that this figure was derived by subtracting imports from exports, and really represents the amount added to existing stocks in the course of the year. During the struggle with the colonies supplies ran short, and some tobacco was again cultivated in England, and extensively in Scotland and Ireland. The figures for *per capita* consumption after 1785 (see tables) are very regular, and seem to indicate an actual diminution in the amount of tobacco consumed rather than a great amount of smuggling or fraud. This explanation we know to be consistent with the facts. The effect of the war of 1812 is marked both in consumption and price, and four years previously the price shows the effect of the American embargo. (Table A.)

TABLE A.
GREAT BRITAIN.

Year.	Entered for Home Con- sump- tion, million pounds. ¹	<i>Per capita</i> Con- sump- tion in pounds. ²	Main Rate of Duty. ³	Price in Bond. ³	Year.	Entered for Home Con- sump- tion, million pounds. ¹	<i>Per capita</i> Con- sump- tion in pounds. ²	Main Rate of Duty. ³	Price in Bond. ³
1786	6.8 ^s	0.7	d. 10	d. 4	1806	12.4	1.1	d. 26½	d. 6
1787	6.7 ^s	0.7	15	3½	1807	12.4	1.1	26½	6
1788	6.9 ^s	0.7	15	3½	1808	12.9	1.1	26½	13½
1789	8.2	0.8	15	3½	1809	13.1	1.2	26½	11
1790	9.0	0.9	15	3	1810	14.1	1.2	26½	8
1791	9.3	0.9	15	3	1811	14.9	1.2	26½	6
1792	9.0	0.9	15	3½	1812	15.0	1.2	28½	6
1793	8.6	0.8	15	3½	1813	13.6	1.1	32	14
1794	9.7	0.9	15	4	1814	10.5	0.8	32	27
1795	11.0	1.0	15	4½	1815	13.2	1.1	38	18
1796	10.0	1.0	19	6	1816	12.8	1.0	38	12
1797	9.8	0.9	19½	9	1817	13.6	1.0	38	12
1798	10.3	1.0	19½	12	1818	13.7	1.0	38	10
1799	11.0	1.0	19½	9	1819	12.9	1.0	48	8
1800	11.8	1.1	19½	6	1820	13.0	1.0	48	7
1801	10.5	1.0	19½	5½	1821	13.0	0.9	48	5½
1802	12.1	1.1	19½	5	1822	13.0	0.9	48	5½
1803	12.6	1.1	19½	5½	1823	13.4	0.9	48	5
1804	12.3	1.1	20½	6	1824	13.1	0.9	48	5
1805	12.6	1.1	20½	5½	1825	14.5	1.0	36	5½

¹ *Parliamentary Reports, Accounts and Papers*, 1829, XXV, 373.

² Estimated.

³ *Marshall Dictionary*, p. 203.

TABLE B.—UNITED KINGDOM.

Year.	Entered for Home Consumption, million pounds.	Duty Paid, £000,000.	Main Duty, per pound.	Per capita Consumption, pounds. ¹	Per capita Duty Paid to nearest penny. ¹	Year.	Entered for Home Consumption, million pounds.	Duty Paid, £000,000.	Main Duty, per pound.	Per capita Consumption, pounds. ¹	Per capita Duty Paid to nearest penny. ¹
1815	18.0	2.4	38	0.9	31	1871	42.5	6.6	38	1.4	50
1816	17.5	2.9	38	0.9	35	1872	43.7	6.8	38	1.4	51
1817	18.4	2.8	38	0.9	34	1873	45.5	7.0	38	1.4	52
1818	17.9	2.9	38	0.9	35	1874	46.6	7.3	38	1.4	54
1819	16.4	2.9	38	0.8	35	1875	47.8	7.4	38	1.4	54
1820	15.6	2.9	48	0.8	34	1876	48.5	7.7	38	1.5	56
1821	15.6	3.2	48	0.7	37	1877	49.1	7.8	38	1.5	56
1822	16.3	3.1	48	0.8	36	1878	48.9	8.0	38	1.4	57
1823	17.0	3.3	48	0.8	37	1879	47.2	8.5	42	1.4	60
1824	16.8	3.4	48	0.8	37	1880	48.3	8.6	42	1.4	60
1825	18.7	3.4	48	0.8	37	1881	49.3	8.7	42	1.4	60
1826	17.7	3.3	36	0.8	36	1882	50.0	8.8	42	1.4	60
1827	18.7	2.7	33	0.8	30	1883	50.6	8.9	42	1.4	61
1828	18.6	2.8	33	0.8	29	1884	51.7	9.0	42	1.4	61
1829	18.9	2.8	33	0.8	29	1885	52.5	9.3	42	1.5	62
1830	19.4	2.9	33	0.8	30	1886	52.3	9.3	42	1.4	62
1831	19.6	2.9	33	0.8	30	1887	53.2	9.4	42	1.5	62
1832	20.3	3.0	33	0.8	29	1888	54.4	8.7	38	1.5	57
1833	20.8	3.1	33	0.8	30	1889	56.0	8.9	38	1.5	58
1834	21.3	3.2	33	0.9	31	1890	58.1	9.1	38	1.6	58
1835	22.1	3.2	33	0.9	31	1891	60.9	9.5	38	1.6	61
1836	22.5	3.4	33	0.9	33	1892	62.6	9.9	38	1.6	63
1837	22.6	3.4	33	0.9	33	1893	62.5	10.1	38	1.6	63
1838	23.5	3.4	33	0.9	32	1894	64.5	10.1	38	1.7	63
1839	23.2	3.6	33	0.9	33	1895	65.2	10.4	38	1.7	64
1840	23.1	3.5	33	0.9	33	1896	68.1	10.7	38	1.7	64
1841	22.1	3.6	34 ^{1/2}	0.8	33	1897	69.8	11.0	38	1.7	66
1842	22.2	3.6	34 ^{1/2}	0.8	32	1898	73.5	11.4	38	1.8	68
1843	23.0	3.6	38	0.9	32	1899	76.7	11.0	32	1.9	64
1844	24.6	3.7	38	0.9	33	1900	80.1	10.9	36	2.0	64
1845	26.2	4.0	38	1.0	36	1901	78.4	12.8	36	1.9	73
1846	26.9	4.2	38	1.0	38	1902	80.7	10.6	36	1.9	61
1847	26.7	4.3	38	1.0	39	1903	81.9	12.5	36	1.9	70
1848	27.3	4.3	38	1.0	38	1904	83.4	12.6	36	2.0	70
1849	27.7	4.4	38	1.0	38	1905	84.8	13.2	39	2.0	73
1850	27.7	4.4	38	1.0	38	1906	86.1	13.4	39	2.0	74
1851	28.1	4.4	38	1.0	38	1907	89.4	13.3	36	2.1	73
1852	28.6	4.5	38	1.0	39	1908	90.0	13.7	36	2.0	75
1853	29.6	4.6	38	1.1	39	1909	87.6	13.8	36	2.0	75
1854	30.4	4.8	38	1.1	41	1910	90.0	15.7	44	2.0	84
1855	30.3	4.8	38	1.1	41	1911	93.1	17.2	44	2.1	92
1856	32.4	5.2	38	1.2	44	1912	93.4	17.3	44	2.1	92
1857	32.7	5.2	38	1.2	44	1913	95.9	17.3	44	2.1	91
1858	33.9	5.4	38	1.2	45	1914	101.0	18.3	44	2.2	95
1859	34.6	5.6	38	1.2	46	1915	108.0	19.3	44	2.3	101
1860	35.2	5.7	38	1.2	46	1916	102.9	25.7	66	2.2	132
1861	34.8	5.6	38	1.2	45	1917	105.5	27.3	66	2.3	141
1862	35.4	5.7	38	1.2	46	1918	107.3	33.3	77	2.4	170
1863	37.4	6.0	38	1.3	48	1919	145.3	46.2	98	3.2	236
1864	38.0	6.1	38	1.3	49	1920	139.1	60.9	98	3.0	311
1865	38.9	6.2	38	1.3	49	1921	136.7 ²	55.6 ²	98	2.9	281
1866	40.5	6.5	38	1.4	51	1922	136.1	55.2	98	2.9	279
1867	40.7	6.5	38	1.4	51	1923 ³	125.7	50.8	98	2.9	283
1868	41.0	6.5	38	1.4	51	1924 ³	128.8	51.9	98	3.0	290
1869	41.4	6.6	38	1.4	51						
1870	41.4	6.6	38	1.3	51						

¹ Figures for *per capita* consumption and *per capita* duty paid are derived directly from those for total home consumption and total duty paid, and discrepancies between them are due to differences in the period for which the latter are given. They will be found to average out over a period of several years (see text).

² Figures for 1920 from *Accounts and Papers*; 1921 to 1924 from *Reports Commissioners of the Customs*.

³ Great Britain and North Ireland.

The importance of tobacco to the revenue is shown in the column marked "Duty paid" (Table B). In the thirty years from 1890 to 1920 the consumption of tobacco was doubled, but the revenue from it increased fivefold. The increased consumption and duty prove that tobacco is an important item in the budget of the average family.

The years given in the tables are not calendar years, and are not always for the same twelve months in the different columns. It will frequently happen that the duty has been changed once or twice in the course of a year at a date nowhere near the end of a financial year, or that the figures for duty received will be for the financial year, and those for tobacco retained for home consumption for quite another period. Again, it should be remembered that tobacco is drawn out of bond only as required for manufacture and sale, but that there is bound to be a great deal of forestalling should the duty be raised and of holding over should a reduction in duty be anticipated.

The column marked "Main duty" gives the rate to which the greater part of imported tobacco is subject. The figures for *per capita* consumption are official for the period after 1855, with the exception of the war years. These latter and those for the period before 1855 have been estimated by the writer.

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THE ECONOMY OF A NORFOLK PARISH IN 1783 AND AT THE PRESENT TIME

It is seldom that the opportunity is presented of placing in juxtaposition the agricultural¹ and social economy of a defined area in modern times and in the last quarter of the eighteenth century. In the case of a certain Norfolk village, however, this operation can be carried out in very full detail, for, not only are records of the occupation, size, cropping and yield of every field, over a period of several years, extant, but there is also available, on the one hand, an estimate of the total value of the produce of this land, and on the other, corresponding figures for all the outgoings of its cultivators in respect of tithe, local rates and national taxation. Thanks to information kindly furnished by the Ministry of Agriculture, augmented by personal investigation on the spot, figures relating to the situation in the year 1923 have been secured, thus making possible a direct comparison between eras separated by some hundred and forty years—a period which, from the national standpoint, exactly spanned the two great conflicts and all that was implied by the advance of industry, and, locally, the struggles of arable farming to maintain its existence during three periods of acute depression.

The village in question is Mattishall, situated some eleven miles west of Norwich, and the preservation of this precise description of its former condition is due to the painstaking work of an incumbent with the not uncommon name of John Smith. The living was, and still is, in the gift of Gonville and Caius College, Cambridge, having been in the patronage of that body since the year 1370. This Vicar, himself a former Fellow of the College, held the cure from 1781 until his death in 1803, and was in the habit of recording annually (with the primary object of securing his tithe), the very minute details referred to above. His repository was a vellum bound note-book, which is preserved in the College treasury.

It should, perhaps, be premised that Mattishall is situated on the undulating ridge which extends north-westwards towards Fakenham, that it comprises heavy soil, is even nowadays in-

accessible except by means of secondary roads, and still looks to Norwich as its market centre for the sale of both grain and live-stock. By the census of 1911 the population numbered 738, and the area of the parish in 1923 amounted to 2221 acres, having a net rateable value of £3630 15s., of which sum the land accounted for £1823 15s., and buildings and other property £1807. For the moment, these modern statistics will suffice, and investigation into the former condition of the parish can be pursued, but it may be noted that no alternative forms of employment have arisen, and agriculture consequently still represents its sole industry. Mattishall was unenclosed during practically the whole of Mr. Smith's incumbency, the local Act taking effect in 1801, when, according to G. Slater (*English Peasantry and the Enclosure of the Common Fields*), 1100 acres were dealt with out of a total area which at that date must have amounted to approximately 2100 acres. The year 1783 has been selected as being typical of the rest, and as having the advantage of being uninfluenced by the war. At that date the area of land comparable with the modern expression "under crops and grass" amounted to 1421 acres, made "by a mensuration between Michaelmas and Christmas . . . including the fences of the different enclosures to the bottoms of the hedges" —so exact was the Vicar! Of this total, 1056 acres were arable land and 365 permanent grass. In addition, there was the common, which, apart from affording facilities for grazing and fuel-gathering, was not definitely productive. The bulk of the Vicar's book, which extends to over two hundred pages, is devoted to an analysis of the successive croppings of the 425 "fields" into which the plough-land was divided; the exact size of each of these plots is recorded, even the number of perches being minutely stated. Other sections comprise elaborate calculations into the value of the products raised by each occupier and the amounts of their several payments in tithe, their assessments to the Poor Rate, the sums collected for Land Tax and for the different forms of national taxation, and also a schedule of occupations. Before quoting these figures and placing them side by side with their modern counterparts, it may be of interest to give an extract from Mr. Smith's own description of the agricultural practices then followed in Mattishall.

"The farmers in the parish of Mattishall generally divide their arable lands into shifts, or parcels, which are nearly equal in quantity, and are cultivated in the following manner. One shift, after lying fallow from harvest to the succeeding Midsummer, is sown with turnips; another with barley or oats; a third with

clover, nonsuch or peas, and a fourth is sown with wheat. But as they sometimes let a small part of what is laid down with clover or nonsuch continue in that state for two years, the number of acres thus cultivated seldom amounts to an entire fourth part of their arable land, but falls short of it, perhaps in the proportion of one acre in twelve. And as they frequently sow barley or oats after their wheat, the number of acres sown with those grains, thus, in some measure, coming in succession twice in five years, namely, after both turnips and wheat, will of course exceed one quarter of the arable land, and will, I believe, be generally found to amount to about three-tenths of it. But to explain the course of husbandry in a still clearer and fuller manner, we will suppose a farmer to occupy one hundred acres of arable land. He will in that case have about 22 acres of turnips, 30 acres of barley and oats, 26 acres laid down with clover or nonsuch or sown with peas, and 22 acres of wheat. The pasture ground is mostly used for the purpose of keeping cows, young stock and horses employed in husbandry, one-fifth only of the whole being saved for hay. But the produce of this quantity of land being by no means sufficient to maintain the cows and other stock during the winter, it is necessary to supply the deficiency with turnips, on which the cows are generally, if not wholly, fed during that season. And these, being drawn for that purpose, become a very valuable tithe to the Vicar, as he is not only indisputably entitled to the tithe of the turnips themselves, but likewise to that of the milk, produced in great abundance by the cows that are fed upon them. Besides the tithes of corn, hay, clover, turnips, milk and calves, there are many other articles, the tithes of which are of considerable value, such as sheep, young stock, geese, pigs and fruit. The three first of these are chiefly kept, during the summer, upon the common. After harvest they are turned on to the stubbles, off which the geese are taken at Michaelmas almost fit for the market, and the sheep and young stock are kept during the winter chiefly upon turnips, a small part of which are eaten upon the land by the former, and the latter are fed upon them when drawn."

Here, then, in 1783 the Norfolk rotation was fully adopted, and no doubt justified the words of the author of *The Farmer's Tour through the East of England*, who declared that "this is a noble system, which keeps the soil rich . . . the land under such management cannot possibly be either poor or foul." Modern agriculturists would, however, welcome some fuller account of the yields secured from turnips sown at Midsummer on land which

cannot have been adequately manured; the suspicion that their dimensions must have been meagre is added to by the fact that Mr. Smith never appraised their actual weight.

The following table may now be introduced to show the use made of the land at the two periods under review. It should be explained that the figure of 1936 acres in the year 1923 represents the agricultural land ("lands under crops and grass"), the excess of some 500 acres over the 1783 total being attributable to the enclosure of the common. The earlier figure admittedly includes cottagers' gardens and certain other small plots, which in the aggregate can have represented only a very small area, while at the present time holdings of an acre in extent and below are excluded. The disparity between the total areas is regrettable, but the inclusion of the common in the area devoted to farming practice would have been misleading, and, if the percentage columns are utilised as the basis for direct comparison, there is no danger of ambiguity arising.

	1783.		1923.	
	Acres.	Percentage of total area under crops and grass.	Acres.	Percentage of total area under crops and grass.
Area under crops and grass	1421	—	1936	—
Arable land	1056	74.3	1589	82.1
Permanent grass*	365	25.7	347	17.9
Wheat	238	16.7	276	14.3
Barley	231	16.3	448	23.2
Oats	67	4.7	49	2.5
Peas	106	7.5	8	0.4
Beans	0	—	22	1.1
Mangolds	0	—	137	7.1
Turnips	200	14.1	194	10.0
Temporary grass	123	8.6	428	22.1
Other crops, gardens, orchards, fallow	91	6.4	27	1.4

It will be agreed that the present use made of the soil a Mattishall, excluding for the moment the all-important factor of the rate of yield secured per acre, is not widely dissimilar from that in vogue in 1783. Naturally, the modern Norfolk tendency towards a larger production of barley is evidenced, and, although beans have appeared in the parish, the combined area under secondary cereals has declined; if turnips were the only choice in "roots" a hundred and forty years ago, they are now rivalled

by mangolds. The main distinction between the distribution of crops at the two periods is to be found in the present-day adoption of temporary grasses, which has caused a net increase in the total area of grass available for feeding purposes either directly or as hay. In 1923 it will be seen that 40 per cent. of the farmed land was under some form of grass, in 1783 this figure was 34.3 per cent. Incidentally, the reduction, not only in the proportionate, but also in the actual acreage of permanent grass demonstrates clearly the economic impossibility of "reverting to grass" in these low rainfall areas of East Anglia.

If animal husbandry is taken as a fresh basis for comparison the following table can be prepared :—

	1783.		1923.	
	Nos.	Per 100 acres.	Nos.	Per 100 acres.
Cattle	310	21.8	334	17.2
Sheep	1000	70.4	459	23.7
Pigs	300	21.1	712	36.8
All live-stock	1610	113.3	1505	77.7

These figures accurately reflect the post-war tendency towards increasing the numbers of pigs on arable farms, and also show that the folding of sheep on heavy land is not a modern practice. Since the figures for the present date exclude live-stock on holdings below an acre in extent, it is probable that the number of pigs now kept by Mattishall villagers would considerably augment the total recorded for this type of animal; in other respects they afford an accurate basis for comparison, with the one reservation that all animals formerly derived a small, but unassessable, benefit from grazing on the common. Again, mere numbers give little indication of the potential output of the industry at each date, for the comparative yields of milk, meat and wool cannot be brought under review.

The human element may now be considered. In 1783 there were 62 householders, so that the population may be assumed to have amounted to between 280 and 300 persons. Of this total 28 were definitely associated with the cultivation of the land, either as "farmers" or "labourers," but, as will be shown in a moment, this figure by no means represents the sum of the male villagers engaged in husbandry, for neither the sons of farmers employed on the land nor, still more important, the small-holders with other and subsidiary trades were thus classified. In 1923,

according to figures supplied by the Ministry of Agriculture, there were 76 whole-time male workers in agriculture, or, including casual hands, a total of 91; the former figure represents a density of employment of 3.9 workers per hundred acres—a favourable rate, and one which is in close agreement with statistics relating to similar arable districts. Assuming that the 41 farms enumerated below were in separate occupation, the total number of “persons engaged” in agricultural work is now 117, or almost exactly six per hundred acres, a figure that is once more in conformity with expectation. There were at least 44 separate “farmers” in 1783, who, with the addition of their ascertainable labourers, formed a total of some 60 persons, or a little over four persons per hundred acres. These last figures are admittedly problematical, for information is lacking to show whether any extraneous workers from neighbouring parishes were labouring on Mattishall farms; and, again, the number of labourers’ sons employed is unascertainable. It would seem, however, that more persons per acre are now engaged in the local agriculture than was the case 140 years ago, and that a population of rather more than double the size is supported.

If the numbers and sizes of the holdings themselves are analysed a very interesting tabular statement can be presented.

Size-group.	1783. No.	1923. No.
Above 1 and under 5 acres . . .	11	8
Above 5 and under 20 acres . . .	19	12
Above 20 and under 50 acres . . .	5	7
Above 50 and under 100 acres . . .	3	8
Above 100 and under 150 acres . . .	5	4
Above 150 and under 300 acres . . .	1	2
Total	44	41
Average size (acres)	32	47

Whilst the pitfalls contained in the above table are patent to anyone familiar with the handling of agricultural statistics, it does, however, afford a certain indication of the distribution of the farmed land at each period. The size-groups are, of course, those adopted by the Ministry of Agriculture, which excludes from its annual review any holding of, or below, an acre in extent; it is also highly probable that, in the case of the year 1923, several of the undertakings included in the smallest size-groups were gardens rather than farms in the strictest sense of that word. Equally, in 1783 the grand total of all separate payers of tithe

amounted to 55, this addition of 11 to the total of 44 being occasioned by the inclusion of several "farms" of an acre or less in extent, as well as by the deliberate exclusion from the table itself of plots designated by the Vicar as "gardens." Numerically, therefore, the comparison is a fair one, provided that it is borne in mind that only holdings above a certain size are included, and, in reference to the figure quoted as that of the average farm, that the area of farmed land was, in the first instance, 1421 acres, and at the later date 1936 acres. The increase of almost 50 per cent. in the size of that fictitious and unsatisfactory entity, the "average holding," is due to the modern tendency for the numbers of very small farms to decline, rather than to any augmentation in the number of those above 100 acres in size, although it might be argued that, at enclosure of the common, preference had been shown to the larger undertakings. Forty-seven acres is not only well below the "average size" of English farms (66 acres), but also represents a decidedly smaller undertaking than the corresponding figure (76 acres) for Norfolk as a whole. What certain contemporaneous authorities would have thought of the distribution of land in Mattishall 140 years ago can be judged by referring again to the *Farmer's Tour*, whose writer had notoriously little predilection for the small farmer:—"Thus, it will at once be apparent that no small farmer could effect such great things as have been done in Norfolk. Inclosing, marling and keeping a flock of sheep large enough for folding belong absolutely and exclusively to great farmers. None of them could be effected by small ones—or such as are called middling ones in other countries. Nor should it be forgotten that the best husbandry in Norfolk is that of the largest farmers. You must go to a Curtis, a Mallet, a Barton, a Glover, a Carr, to see Norfolk husbandry. You will not among them find the stolen crops that are too often met with among the little occupiers of a hundred a year in the eastern part of the county. Great farms have been the soul of Norfolk culture; split then into tenures of a hundred pounds a year, you will find nothing but beggars and weeds in the whole country. The rich man keeps his land rich and clean." There were certainly no Curtises, no Mallets, no Bartons, no Glovers or Carrs at Mattishall, for the largest farm covered 174 acres. "The little occupiers of a hundred a year" were here the giants of the industry, and such insignificant fry as the occupiers of from one to twenty acres would have been beneath the notice of our authority, but that they were numerically well represented in such a purely arable district as West Norfolk is interesting. The list of occupations

given in Mr. Smith's book, however, makes it obvious that practically every small man had other means of sustenance, for such designations as "carrier," "inn-keeper," "wheelwright" and "cordwainer" must have been synonymous with "small-holder." The experience of other countries and later periods has testified to the wisdom, if not to the economic necessity, of providing such additional forms of livelihood.

It may be of interest to record briefly the agricultural practices followed by the different occupiers. Here the outstanding feature to note is that the smallest farmers were, in 1783, producing crops similar to those of their larger rivals, and producing them in almost similar proportions; this is particularly noticeable in the case of cereals, and appears to have been free from any association with open-field cultivation, as detached enclosures were cultivated on the same lines. The commentary of the present-day agriculturist is that they obviously lacked their successors' stand-by in the shape of vegetables, small fruit and, to a lesser extent, pigs. For example, one J. Allen produced 2 acres, 1 rood, 16 poles of oats, and 2 acres, 1 rood, 10 poles of clover. F. Bush raised 1 rood, 16 poles of wheat and a similar acreage of oats; James Cobb had 2 roods, 1 pole of barley; J. Hubbard 1 acre, 2 roods, 17 poles of wheat, and 2 acres, 2 roods, 1 pole of oats, and so on throughout the inventory. As many as nine farmers kept sheep, but twenty-seven supported cows, even some holders of less than an acre managing to provide for one apiece. Only eleven possessed pigs, and these were often not found in the smallest class; geese were evenly distributed, both large and small-scale farmers relying mainly on the common for their feeding and on the stubble for their autumn fattening. As this was not light soil, sheep were valued rather for their wool than for manurial purposes, and the relatively small number of lambs annually produced by the flock indicates that considerable numbers of hoggets were retained.

It will naturally be asked how the rates of yield compare with present-day standards. Mr. Smith, with great industry, estimated these weights for each cereal and also for hay, preparing separate figures for every individual payer of tithe. The upshot is that, taking the average of five successive years, the yield of wheat comes out at 22 bushels, of barley 29 bushels, of oats 32 bushels, of peas 20 bushels and (on one occasion) of beans 28 bushels. Oats provided the most regular crop, while barley fluctuated considerably above and below the level of 29 bushels. Corresponding figures for the principal cereals raised in Mattishall at

the present time are as follows:—wheat 32 bushels, barley 36 bushels and oats 56 bushels. Any reliable figures dealing with the rate of yield of cereals in bygone periods are always of considerable value; these particular examples are not at variance with the reports of Marshall, Young and Kent, and serve to emphasise the generally accepted statement that the bulk of improvement recorded by the time of high farming in the 'fifties of the next century was applicable to wheat and oats. It may be added that the yields obtained by the small farmers compared favourably with those of their larger neighbours.

Having surveyed the agricultural economy of the village, it is now possible to investigate the value of its output; here a double operation can be simultaneously performed, for the figures prepared by the Vicar enable one to assess the drain on the industry which his own tithe represented.

“An estimate of the quantity and value of the corn and other tithes produced in the parish of Mattishall from Michs. 1783 to Michs. 1784.” (The values were those “current in Norwich market at the time.”)

	Total value.	Value of tithe.
	£ s. d.	£ s. d.
238a. 3r. 8p. of wheat at 5 combs per acre (1194 combs at £1 2s. per comb)	1313 8 0	131 6 9½
231a. 2r. 3p. of barley at 8 combs per acre (1852 combs at 10s. per comb)	926 0 0	92 12 0
67a. 1r. 12p. of oats at 8 combs per acre (538 combs at 9s. 2d. per comb)	246 8 8	24 12 10½
106a. 3r. 18p. of peas at 3 combs per acre (321 combs at 13s. 6d. per comb)	216 12 0	21 13 2½
83a. 1r. 25p. of nonsuch at 30 combs per acre (2500 combs at 3s. per comb)	375 0 0	37 10 0
40a. 3r. 37p. of clover at 30 combs per acre (1228 combs at 3s. per comb)	184 4 0	18 8 4½
72a. 1r. 13p. of hay at 30 combs per acre (2170 combs at 3s. per comb)	325 10 0	32 11 0
200a. of turnips at £2 per acre	400 0 0	40 0 0
4a. 1r. 2p. of buckwheat ploughed in	—	—
2r. of hemp at £4 per acre	2 0 0	0 4 0
2a. 1r. 10p. of gardens at £10 per acre	23 2 6	2 6 3
160 cows at £6 each	960 0 0	96 0 0
150 young stock, the agistment of which at £1 per head p. a. comes to	150 0 0	15 0 0
800 sheep at 1s. 6d. for wool	60 0 0	6 0 0
200 lambs at 6s. each	60 0 0	6 0 0
500 young geese at 1s. each	25 0 0	2 10 0
500 geese bought by the farmers and improved by shackleage at the rate of 1s.	25 0 0	2 10 0
300 pigs at 2s. 6d. each	37 10 0	3 15 0
70 orchards at £1 each	70 0 0	7 0 0
Total	£5399 15 2	£539 19 6

While this inventory of titheable commodities, covering both rectorial and vicarial dues, does not embrace many which can be described as contentious, yet it demonstrates that Mr. Smith was determined to claim his rights upon such relatively unimportant items as the produce of gardens and orchards, as well as upon the "increment value" of young geese. One notes, however, that he generally failed to secure tithe on the honey produced in the parish—"what the value of it may be I am in no wise able to determine"—apparently it was too risky an undertaking closely to investigate the hives! It must be observed that cash payments were accepted in all cases, and that tithing in kind was not practised. The sum of £6 per cow was the agreed value of her milk and annual calf; there were only two hundred ewes in the flock of sheep, and each was credited with one lamb. Turnips escaped with a flat-rate payment, and there was, accordingly, no need to differentiate between those fed to stock on the spot and others drawn for subsequent consumption, a most prolific cause of lawsuits in other localities. In 1783 the weight of corn connoted a yield slightly below the average.

The gross value of the output of these 1421 acres of Norfolk soil works out at £3 16s. per acre; subsequent years naturally produced higher figures, as the Vicar in 1801 proudly referred to his tithe as being worth upwards of £600 per annum, and added that, though the living had been "for a long time despised, and more than once, I believe, refused by all the Foundation Fellows of Caius College, it is but little, if at all, inferior to the best preferment in the patronage of that society."

So far as certain cereal crops are concerned, it might be possible to effect a monetary comparison with the corresponding output in 1923, but any complete estimate would be out of the question, since live-stock and roots would call for a complex analysis. The only statement of real value would be that provided by the net profits secured at each period, and, for such a purpose, it would be necessary to ascertain the rents paid and the extent of the wages bills. If it were desired to pursue this question further, there exist two indirect methods of estimating the rental value of Mattishall land in 1783. The assessments to Poor Rate represented a net valuation of £1020, or slightly over 14s. per acre, but the former figure comprised a certain quantity of non-agricultural property; the error would not, however, have been important. Secondly, in *A Report on the Agriculture of Norfolk*, compiled in 1840 by R. N. Bacon, there is a table showing, for numerous farms, and over a period of many years, the relationship

between the value of their produce and the rents they commanded. Under varying economic conditions, and on different types of undertakings, the value of the output ranged between 6.2 times and 3.9 times the rent, giving an average figure for all holdings over fourteen years of 4.6. If this figure is applied to the case of Mattishall, a rental of some 16s. 6d. the acre results, a sum that (*pace* contemporary writers) would appear to be highly probable for this type of soil at the period in question, and one that harmonises well with the 14s. on the assessment basis. It may be noted in passing that the gross estimated rental value of the land alone at the present time is almost exactly 20s. the acre (£2247 on 2221 acres of land within the parish). If adjustment be made for the altered value of money, it would appear therefore that agricultural land in this part of Norfolk now commands approximately the same rental, since 20s. may be taken as equivalent to 15s. in 1783. With regard to labour, the position is more uncertain; all that can be said is that it must have cost at least 10s. per acre and may have amounted to over 20s. A present-day figure for comparable land would be 46s. per acre, or 34s. 6d. in 1783 values, thus affording clear evidence that an increase has occurred in the cost of labour disproportionate to the rest of the outgoings.

For other, and statutory, forms of expenditure there exist the means of effecting comparison between the two periods under review, since the Vicar's book contains an exact description of the payments to Land Tax, Poor Rate and national taxes, and, with the exception of the latter class, the equivalent present-day figures are available. With the addition of tithe the total disbursements under the three largest heads can then be placed side by side, as follows :—

	1783.			1923.
	£	s.	d.	£
Tithe	539	19	6	784
Land tax	199	15	0	104
Rates	83	5	0	1167

Certain features should be noticed. Thus, these sums represent the total payments made by all the individuals resident, or conducting their undertakings, within the respective parochial boundaries, and are not necessarily confined to "farmers" only. In 1783 rates were 1s. 9d. in the pound, in 1923 they were 10s. 4d., but the modern agriculturist, reaping the combined benefits accruing from the 1896 and 1923 Rating Acts, escapes, in so far

as his land is concerned, with a quarter of the liability of his ancestors. Thus, at the present time the portion contributed by farm land, of the total of £1167, only amounts to £234, the balance coming from other forms of rateable property (buildings, tithe, etc.); to the above sum must also be added the grants received from the Exchequer under the two Acts. The figure of £784 under the head of tithe in 1923 is made up of Rectorial, or Improprate, £488 and Vicarial £296; it would, of course, have been very largely augmented but for the post-war legislation which fixed the value of tithe at £109 3s. 11d. until 1926. In the first period Land Tax was assessed at the maximum rate of 4s. in the pound; it will be agreed that this historically suspect and agriculturally uneven tax was then a real "burden" in these East Anglian arable districts, where its incidence was especially marked. Redemption, combined with reduction in the rate of assessment, has now reduced its weight considerably. At neither time did other forms of direct national taxation seriously affect the situation of the Mattishall agriculturist, for it was only after 1799 that Mr. Smith troubled to give a list of the payments rendered under the now familiar heads of property, window, vehicle, dog, man-servant, and inhabited house duties; such of these as existed in 1783 would have weighed lightly on agricultural occupiers. Socially, however, the list in which they are given affords corroborative evidence that, apart from the Vicar himself, one "gentleman," a "widow lady," and "the surgeon," there were only farmers, their employees, and certain small tradesmen resident within the parish. Incidentally, that recent and delightful publication by Mr. John Beresford, *The Diary of a Country Parson*, which deals with life in the adjacent village of Weston, confirms this statement, for we learn that the diarist, the Rev. J. Woodforde, was on calling terms only with the Vicar, the widow, and the surgeon. There is little evidence that, in 1923, national taxation, as represented by Income Tax, need have seriously affected the agriculturists of Mattishall, for even if Schedule D was not adopted, there are, as was shown above, no farms sufficiently large to be inconvenienced by Schedule B. In an area such as the one under review, and in times such as the present, the Inland Revenue authorities can have no terrors for the East Anglian tenant-farmer, whatever their relationship may be with the owners of large properties.

If the three charges enumerated in the last table are reduced to an acreage basis, it appears that they amounted to 11s. 7d. per acre in 1783 (equivalent to 15s. 5d. in terms of 1923

values) and £1 1s. 3d. per acre in 1923. It may be urged that, in the latter year, only the rates paid on agricultural land should be included (when, by an odd coincidence, the figure remains at 11s. 7d.); in the absence, however, of means for distinguishing between the rateable value of land and of buildings in 1783, it would be impossible to repeat this procedure then. Further, what is really required is a figure which indicates the total charges on the whole area and community at each date, and that is precisely what is recorded in the first instance.

The economic and financial aspects of the agricultural condition of Mattishall at the two periods have been surveyed in the previous pages, but the writer makes no attempt to assess its comparative prosperity in 1783 and in 1923; he merely seeks to record the bare facts, and to leave to others the solution of this difficult problem. If a summing-up be demanded, it might be fair to suggest that this parish, in common with the rest of Norfolk, succeeded during more than a century and a third, punctuated with economic, climatic and national upheavals, in maintaining both its proportionate arable area and the number of its cultivators; it also doubled its dependent population, augmented its yield per acre of both grain and meat, and has recently, at a time of depression almost as severe as any which have gone before, made heavy payments to local, national and ecclesiastical taxation funds. At the same time it must not be denied that in this respect its agriculturists, in common with all others, have latterly received remissions considerable in weight and valuable in their peculiar incidence.

The writer's cordial thanks are due to Professor T. B. Wood, C.B.E., F.R.S., who drew his attention to the Vicar's book, and who may, therefore, be said to have initiated this article, to Mr. J. F. Cameron, M.A., the Bursar of Gonville and Caius College, to the Rev. E. Madoc Madoc, the present Vicar of Mattishall, who augmented the information relative to tithe, and to Mr. A. G. Randall, who supplied details of the modern rating of the parish.

J. A. VENN

THE SOCIAL EFFECTS OF THE AGRICULTURAL REFORMS AND ENCLOSURE MOVEMENT IN ABERDEENSHIRE

IN Northern Scotland there is a marked difference between the respective effects of the enclosure of mainly pasture and mainly arable lands. The making of the hill sheep farms and the clearing of the straths is the most debatable point in Scots rural history; on the other hand, at least in Scotland north of the Forth, the enclosure of purely arable land came about so quietly that it is most difficult to trace the movement in any given district.

Although patches of cultivation are to be found in the straths of the centre and the West, the main arable districts of Northern Scotland lie along that shelf of lowland country, between the hills and the sea, that stretches up the East Coast. By the lie of the land the boundaries of the strip are clearly marked, but no civil divisions demarcate them, and it is therefore impossible to obtain exact data as to changes in population, etc., in these districts. I have selected Aberdeenshire as a fairly typical East Coast county, covering an unusually large proportion of the coastwise country, and, even in its hilly districts, comparatively little affected by the sheep-farming movement. At the end of the eighteenth century it seems to have been slightly exceptional in the number of smaller holdings, and nineteen-year leases seem to have been more general there than further north. But, for purposes of comparison, it has the great advantage that the agricultural reforms were largely introduced there between 1792 and 1846, the dates at which the First and Second Statistical Accounts—semi-official returns drawn up by the ministers of the Established Church in every parish in Scotland—were compiled.

As sources of information the Statistical Accounts have good and bad points. The ministers wrote as practical agriculturalists and with an intimate knowledge of their parishes. There was little of that fellowship of caste between laird and minister such as tended to exist between squire and parson. In the accounts for Aberdeenshire one comes across such terms

as "feudal prejudices," "mistaken submissiveness," "gothic services" (for labour dues), and the writers were quite frank if they thought leases too short, rents too high, or "meliorations" insufficient. On the other hand, the reports have their failings; some are very cursory and barely cover a page, many are vague, others show obvious bias. It is maddening to find how seldom the accounts in the two collections lend themselves to exact comparisons. Yet, on the whole, they fully bear out the more general picture given in the County Reports drawn up for the Board of Agriculture, and they often give that background and interpretation without which the most accurate of bare figures may be unprofitable or even misleading.

The histories of the change from open-field cultivation to modern arable farming in England and Scotland are very different. Perhaps this difference is best summed up in the differing meanings that in the eighteenth century attached to the word "enclosure" in the two countries. In England, besides meaning the actual fencing of a field, it is employed to denote the legal subdivision of land held in common. In Scotland the word was constantly employed by eighteenth-century writers in the first sense—almost as often in connection with plantings as with fields¹—but, personally, I have never once come across its use in the second sense, *i.e.* that of the legal division of common land.

As a matter of fact, such formal divisions seem very rarely to have taken place. By a Scots Act passed in 1695 "anent the division of run-rig," the consolidation of such holdings were to be carried out by the Sheriff, and by another Act of the same year, the Court of Session was empowered to divide common lands. Individual Acts of Parliament were unnecessary. The Abstracts of the decisions of the Court of Session show that appeals under the first Act were rare, and that there were very few instances of the division of common lands north of the Forth. Apart from the shadowy layers of feudal superiorities it was not the custom of the country to own land in common. For instance, Anderson, in the Report to the Board of Agriculture for the County of Aberdeenshire, says that no land in that county is owned in common,² and on the whole the individual

¹ Cf. C. Fraser Mackintosh, *Letters of Two Centuries*. "We have got the Craig to the northward of the House of Dunain enclosed, and mean to have it planted directly with firs," p. 270.

² Anderson, Report on Aberdeenshire to the Board of Agriculture, p. 40. "Of commons in the strict sense of the word I know of none in the County. Indeed they are scarcely known in any part of Scotland unless a few belonging

statistical accounts of the parishes bear this out, the only examples being two pieces of land vested in boroughs and two unimportant "Commonties"—a Scots term that often meant little more than undemarcated land lying between two or more properties, and is not the equivalent of the English "Common."¹

Yet although land was rarely held in common in Northern Scotland, the custom of joint *leaseholds* was very prevalent. The very names of the division of land in Eastern, Southern and Central Scotland are based on the custom of joint cultivation. The Davoch of 416 acres was divided into four Ploughgates of 104 acres, which seems to have represented the area of the typical farm, and of the winter's ploughing of the common plough.² The Ploughgate was subdivided into four Husbandlands and eight Oxgates or Oxgangs, the former being a common unit for the smaller Highland farms, and the oxgangs representing the extent of the holdings of the individual joint tenants and being each supposed to supply an ox for the common plough.³ The acreage quoted seems to have been almost purely nominal, and in practice land seems to have been measured more by the units it was supposed to maintain than by its acreage.⁴

There are farm leases of the late eighteenth century that show the arrangement of the eight joint tenants of the ploughgate still surviving, but an unvarying organisation was probably never general—even mediæval charters refer to farms considerably larger than one ploughgate or to four or five oxgates on a farm being held by one tenant.⁵ On the other hand, in the Highlands, the oxgates were often divided in half, to support the dense population; thus half an oxgate was the usual holding of a joint tenant in the Mackintosh leases of the eighteenth century.⁶ The position became further complicated by a class of cottars and "acremen," who were dependents of the joint tenants and received a proportion of corn and pasturage in

to borough towns; for however poor the soil may be, it always can be claimed by an appropriated owner; and though in the case of moors and heaths the line of march between different proprietors may not be very distinct . . . yet it is in general in the power of the proprietors themselves to settle that line of march where they incline."

¹ C. Fraser Mackintosh, *Letters of Two Centuries*, pp. 139 and 202, illustrates the current type.

² Spalding, *Club Miscellany*, IV, 261.

³ C. Cosmo Innes, *Legal Antiquities*, pp. 241, 254. See also Rhyne, First Statistical Account, XIX, 290.

⁴ Moy, First Statistical Account, VIII, 507.

⁵ W. F. Skene, *Celtic Scotland*, III, scattered through Chap. VII, p. 246; C. Cosmo Innes, *Legal Antiquities*, Chap. VI, p. 241.

⁶ Leases preserved in the Mackintosh Muniments.

return for work in the common field.¹ The extents of the individual holdings were therefore by no means rigid, and in farms where one can trace out the tenant's holdings at different dates, one finds that a constant variation seemed to go on.² Such a plastic state of affairs must have simplified the gradual introduction of the new system of agriculture.

On a certain number of farms the old system of joint tenancies passed directly into the new one, probably, as a rule, after a good deal of gradual consolidation."³ But more often there was an intermediate stage, for the tacksman system became very common in Scotland in the seventeenth century. It became usual for the proprietor to let a large piece of land, perhaps a davoch, to a man of some substance, often to a cadet of his own house, on a long lease,—“three nineteen years” was fairly usual, but quite often a longer term of years is mentioned. In a rent roll of the great Gordon estates in Aberdeenshire, dating from the early sixteenth century, both types of leaseholdings are to be found, but the tacksmen predominate.⁴ Under the tacksman system there was a considerable amount of joint cultivation. The tacksman sublet some of his land and cultivated the rest with the help of the “labour dues” of his subtenants. Certainly in some instances the tacksman's and subtenant's land lay in intermingled strips in the common field.⁵

At the time of the First Statistical Account tacksmen still leased a considerable part of Aberdeenshire, and subtenants were usual not only on their farms but on those of lesser men. At Tarland and Migvie,⁶ a remote parish in the hilly South-western corner, “there are about fifty or fifty-four farms, some of larger and some of lesser extent; some possessed by one and others by two tenants, each of whom have from two to three,

¹ W. Marshall, *Account of the Agriculture of Central Scotland*, p. 29.

² For the Farm of Dunachton (Inverness-shire) compare Rent-roll of the Lordships of Huntly; *Spalding Club Miscellany*, IV (Kinicaig only), 297; C. Fraser Mackintosh, *Antiquarian Notes*, Series I, p. 78; I. F. Grant, *Everyday Life on an Old Highland Farm*, p. 102.

³ Actual examples of the process are rare. Some old documents relating to the estate of Drumchardny (Inverness-shire), and printed in the *Estate Magazine*, Nov. 1924, show that the original organisation had become modified and that there were three “half davochs” and twenty-seven smaller holdings. There were twenty-one tenants, several having shares in more than one holding (in some cases four), and these different shares were dotted about the estate.

⁴ Coul, First Statistical Account, III, 198, gives a good definition of the word. Gordon Rent-roll. *Spalding Club Miscellany*, IV, shows prevalence in Aberdeenshire.

⁵ I. F. Grant, *Everyday Life on an Old Highland Farm*, pp. 102, 103.

⁶ Tarland and Migvie, First Statistical Account, VI, 222.

and some four or five subtenants." And subtenants are mentioned as a matter of course all over the county as the main source of agricultural labour.¹ Thus at Monymusk, one of the most agriculturally advanced parishes in the county, there were said to be thirty-four farms and eighty-five subtenants. The minister of Udney² gives a good general picture of the close connection between farmer and subtenant. The latter was said to have "a bolls sowing or two" of land (i.e. about one or two acres, in several accounts he is said to have had a "rig"), which was "ploughed to him"; his beasts were pastured with the farmer's cattle and he had the right to cut a supply of peats and to have them carted. In return, "he works to the farmer in harvest and attends the plough during winter and spring." The proportion of rent and personal services by which he paid the farmer for his share of the farm varied considerably, even on the same farm or estate.³

The minister for St. Fergus gives a fairly typical account of a parish in which the new organisation was introduced systematically and rapidly, but in many parishes the change seems to have been more gradual. He writes: "In 1766 the whole parish was let for eleven years certain and the lifetime of the individual tacksmen. . . . Soon after the expiry of the certain period of tack covenanted upon, the life-renters began to drop off; and when the farms which they had occupied were large, they were subdivided and the rents raised and apportioned among the tenants previously resident upon the farms. Others were allowed to remain at the former rents, when the immediate heirs of the deceased tacksmen succeeded; and where there were no heirs wishing to succeed, the farms were allowed to go to, and remain in grass, until almost the whole of the life-rents expired, in order to allow the proprietor the means of straightening the marches and making other necessary arrangements for improved methods of tillage."⁴

The Statistical Accounts for Aberdeenshire bring out very clearly the fact that it was the improved methods of cultivation, and especially the introduction of turnip-growing, that primarily brought about the demarcation of the individual holdings, which

¹ Monymusk, First Statistical Account, III, 66; Kennethmont, *ibid.*, XIII, 66; Keithhall, *ibid.*, II, 527.

² Udney, First Statistical Account, IV, 156.

³ Cf. Rental of Drummond Estate, quoted by C. Cosmo Innes, *Scotch Legal Antiquities*, p. 226.

⁴ St. Fergus, First Statistical Account, XV, 134. The rental was increased from £1418 19s. 5d. in 1766 to £3000 in 1803.

rendered the making of fenced fields possible.¹ The Scots open-field system varied somewhat from the English; the farms were divided into "infield" land, which was copiously manured and bore continuous crops of oats and bear or barley, and "out-field," which consisted of the poorer or less accessible land. Portions of this were brought under cultivation in turn, and then bore continuous crops until the soil was exhausted, when it was allowed to lie fallow for some years. The only manure it received was from the practice of folding the animals upon that part of the outfield which was next to be cultivated. As in England the rigs of the different cultivators were, to quote a picturesque account, "interwoven" in the common fields, and the cattle were pastured "promiscuously." In Scotland, with its less fertile soil and much worse climate, this elementary system probably gave much poorer results than in the South. At any rate, there is no lack of testimony as to the abject poverty of the people.² To quote actual figures, Sir John Sinclair made careful estimates which showed that the usual dietary of a farmer with about thirty acres of arable in a very fertile district only just enabled him to "subsist," but "hardly in a manner adequate to give spirit or strength for labour."³ From calculations based on farm accounts for Upper Strathspey, I do not think that the cultivators of an oxgate of land in that district got this amount of food in three years out of ten.

In Scotland the reforms in agriculture worked their way northwards from the Lothians. The gentry took up the improved methods as a kind of hobby fairly quickly on their home farms. In Aberdeenshire, by 1792, when the First Statistical Account was compiled, in all instances the proprietors' own farms were being vigorously improved, and evidently had a ring fence round them, but in a good many of the more hilly districts there was no resident laird, and the local people had not the advantage of this type of "observation farm."

Among the farmer folk the reforms made much slower headway, yet, at the time of the First Account, in the more prosperous and get-at-able parishes of the North-east side of Aberdeenshire, the big farmers—virtually the tacksmen—were carrying on the new methods. In the most advanced parishes perhaps a dozen farmers are mentioned as beginning; in those not quite

¹ Anderson, Report to the Board of Agriculture on the County of Aberdeen, p. 54.

² Cf. Birt, *Letters from a Gentleman in the North of Scotland*, II, 85.

³ I.e. six bolls of meal with milk and a little fish. Sir John Sinclair, *Survey of the Northern Counties*, p. 76.

so advanced, only two or three of the most considerable men. One gathers that in about one-third of the parishes of the county this rather tentative, piecemeal kind of improvement was being carried on. But, in addition, in as many as twelve or fourteen parishes situated either in the extreme North-east or close to Aberdeen the practice of the reformed methods had permeated more widely, and even the smaller men were beginning to lime and grow an acre or two of turnips.¹ Even in the ridgy uplands between the level coastwise ground and the higher hills some knowledge of the new agriculture was spreading, and the people were beginning to grow what several ministers rather happily describe as a "spot" of turnips. Only in the remote districts right up in the hills "all the old-fashioned prejudices of husbandry are still looked upon as sure and infallible rules of good management."²

The order in which the improvements were introduced varied. At Kildrummy³ the first step was the liming of the infield. At Kennethmont the outfield was the first to be limed. In some parishes the straightening of the crooked ridges was a very early step. At Alford, which at the time was entirely unimproved, multures⁴ and labour dues had almost lapsed, whilst they were still in force and very onerous in some of the most advanced northern parishes. The minister of Birse⁵ describes the confusion that existed. Some of his parishioners were liming their ground, whilst others averred that there was already too much in the soil. "Some are cleaning their ground by a little green cropping, and by laying it down with artificial grasses, others are going on taking two or three successive crops of oats, and of bear . . . without allowing some portions of their ground any rest in a century. . . . Some are going on with spirit, enclosing and clearing their ground of stones. Others are throwing every impediment in the way of the improvers, by trampling down the fences, and by not only neglecting to remove stones from their fields, but even by alleging that the stones are beneficial to the soil, and tend to nourish the crop." In reading the First Statistical Accounts, however, one must allow for the fact that

¹ Cf. King Edward, which was specially advanced. First Statistical Account, X, 395.

² Alford, First Statistical Account, XV, 447.

³ Kildrummy, First Statistical Account, XVIII, 411.

⁴ Payments for grinding corn. The tenants were "astricted" to the landlord's mill, and considerable abuses were not unusual. The rates charged varied enormously in the different parishes.

⁵ Birse, First Statistical Account, IX, 103.

the ministers naturally dwelt upon what was new and interesting. Nowhere was there a regular rotation of crops, and even in the most advanced parishes the old divisions of "infield" and "outfield" land still generally obtained, showing that the old arrangement of the land still survived to a large extent.

Although all these improvements were of importance, there was one definite sequence of cause and effect that did more than anything else to bring about the change from scattered, jointly cultivated holdings to consolidated individually leased farms, without which the enclosure of the land into separate fields was difficult to arrange, and does not seem to have been attempted in Northern Scotland. Adam Smith has traced the predominant effect of the expansion of the cattle trade with England after the Union upon Scots agriculture. He says: "The increase of stock and the improvement of land are two events which must go hand in hand" (*The Wealth of Nations*, Book I, Chapter II, part 3). Scotland is notably unsuitable for providing winter pasturage for stock, and one of the greatest agricultural problems of the old days was how to maintain the cattle during the winter. In spring and summer they were herded off the crops, but as soon as the harvest was got in "the countryside was regarded as one universal common" (Sinclair), and they wandered unchecked over all the countryside, devouring every blade of grass and even eating the roots as the plough turned them up in the spring.¹ Fattening the cattle was out of the question, it was a problem to keep them alive. In the Highlands upon an average one in five of the hardy "black cattle" were lost through starvation.² The minister of Lumphanan, in Aberdeenshire, wrote that the people were forced to sell their beasts in the autumn "to great disadvantage . . . , to put them to the glens or to starve them at home."³

As early as 1686 an Act of Parliament was passed ordering the farmers to herd their "nolt, sheep and other bestial," "as well in the winter tyme as the summer" and to keep them folded at night "soe as they may not eat or destroy their neighbours' ground, woods or planting."⁴ The Act, however, was generally ignored until the introduction of turnips and sown

¹ A. Marshall, *General View of the Agriculture in the Central Highlands of Scotland*, pp. 38, 39; Birt, *Letters from a Gentleman in the North of Scotland*, II, 132, etc.

² Sir John Sinclair, *General Survey of the Agriculture in the Northern Counties*, p. 114.

³ Lumphanan, *First Statistical Account*, VI, 382.

⁴ *Acts of the Scots Parliament*, p. 595, 1686.

grasses forced the farmers to take action. Ramsay of Ochertyre wrote that with the introduction of these improvements, the tenants "begin to have an idea of property in winter as in summer; nor is it any longer thought bad neighbourhood to drive off cattle that are trespassing upon their winter crops."¹ At the time of the First Statistical Accounts, in the backward, hilly, south-western corner of Aberdeenshire, in six parishes winter herding was "looked upon as an intollerable grievance and therefore not practised."² Thus at Auchindoir³ "as soon as the corn is off the fields, the cattle are let loose without a keeper. The sown grass and turnips are the objects of their depredations, and these, as the country is open, it is impossible to preserve." In several parishes where turnips were being more generally grown and winter herding had had to be introduced, the labour of keeping the hungry beasts away from the roots was complained of.⁴ Enclosures of some kind were, in fact, inevitable where improvements were introduced. Ramsay of Ochertyre writes: "Nothing indeed but a stone fence will keep out cattle that have once tasted that delicious root. For it every other food is loathed; and the moment they are turned out they run straight to the turnip field, and if access to it cannot be had, stand at gaze for hours. Some of our tenants told me their cows were more the worse than the better of turnips, from being hard hunted and put off their usual food."⁵

At the time of the First Statistical Account seven Aberdeenshire proprietors had already attempted a systematic improvement of the patchwork, haphazard fields and intermingled holdings. Thus Mr. Cumin of Auchray⁶ began to improve his estate about 1739. "He gradually subdivided the larger farms, and bound his tenants to drive annually from the quarries, seven Scotch miles distant, a prescribed quantity of limestone, which he taught them to break, burn and apply; he obliged them to sow a certain portion of their land with turnip, flax and grass seeds; . . . he frequently walked or rode through his estates, freely conversing with his tenants, rousing them to industry by motives suited to their respective tempers. . . ." Alexander

¹ John Ramsay of Ochertyre, *Scotland and Scotsmen in the Eighteenth Century*, p. 277.

² Glenmuick, First Statistical Account, XII, 215.

³ Auchindoir, First Statistical Account, XII, 490.

⁴ Old Meldrum, First Statistical Account, XIII, 135.

⁵ John Ramsay of Ochertyre, *Scotland and Scotsmen in the Eighteenth Century*, p. 273.

⁶ Monquhitter, First Statistical Account, VI, 121.

Fraser of Strichen¹ and Sir Archibald Grant of Monymusk (one of the best known of the local improvers,² followed much the same lines. Sir Archibald brought men from the South to teach his tenants, and showed the people the practical advantage of "draining, cleaning, straightening and green cropping their land." As mere example was not enough, he obliged them in their leases to enclose a certain amount of land annually and to grow a proportion of green crops. By 1792 Sir Archibald had been gathered to his fathers, but his people were described as "enthusiastically content" with the results of these enforced improvements. St. Fergus has already been alluded to.³

In two parishes more sweeping schemes of reorganisation were attempted. Longside was peopled by small tenants—three or four used to join together to work their common plough. The minister considered that "no simplification of the different branches of agriculture can be accomplished on a very small scale," and was in favour of amalgamating the farms and converting "many of the present possessors of them" into day labourers. "Both classes would be benefitted, and live infinitely better than these do at present. Proprietors ought at least to have this in view, if they wish to see their estates improved or the tenants on them comfortable." Fergusson of Pitfour, the principal proprietor, however, proposed to go further—"by granting no leases for many years past, he has at present much in his power, with regard to new-moddelling his farms, and putting them upon a proper footing. With this view he has paid particular attention to the different modes of farming, both in England and the South of Scotland. But to introduce so complete a change . . . all at once (if at all practicable) is attended with great difficulties; and gradual reformation is perhaps here, as well as in most other departments of human labour, a preferable plan."

At Premnay,⁴ a small and backward parish in the hilly part of the county, the late proprietor had begun to improve his lands "on a great scale." He fetched lime from Aberdeen at great expense. "The fields were enclosed and planted with hedgerows. . . . Proper farmhouses and other necessary buildings were erected, and the lands, after being several years in the proprietor's own hands, were let to different farmers." The

¹ Strichen, *First Statistical Account*, VII, 416.

² Anonymous, *Northern Rural Life*, p. 102.

³ St. Fergus, *First Statistical Account*, XV, 135.

⁴ Premnay, *First Statistical Account*, XVI, 637.

results were unsatisfactory. The proprietor himself lost heavily, and the Second Statistical Account describes how the hedges merely went to waste. The population fell from 448 in 1755 to 260 in 1788, "when the old farmers were removed." Fifteen years later it had recovered itself, but the tone of the neighbourhood had suffered, for a new population "cannot be supposed to be so much attached to the soil or to the proprietor, as where they have resided on the lands from their infancy."

In blaming proprietors for mistaken methods it is only fair to remember how experimental were agricultural improvements. At New Deer and several other parishes lime was at first put on the ground so cautiously that it produced no effect, and then so copiously, and, in consequence, the land was so overcropped that its fertility was still impaired nearly forty years afterwards.¹ Part of Crimond was laboriously enclosed with earthen dykes, as the early improvers advised, and they were found to be useless.² The straightening and levelling of the old "rigs," sometimes made for patchy crops—light and early where the subsoil had been displaced from the crown of the ridges and waterlogged, and late where it had accumulated in the old furrows. So great was the general ignorance, that Sir Archibald Grant had to write a careful treatise explaining to the farmers that the laws of heredity applied to stock-raising.³ Even the Second Statistical Accounts, written in 1846, are full of the difficulties of finding the most suitable rotation of crops and of the hardships that had resulted from an enforced adherence to the Berwickshire seven-shift course; and the question of the crossing of the Buchan and "Teeswater" (Shorthorn) breeds was a very moot point.

It is interesting to consider how far these early attempts at agricultural reform appreciably influenced the considerable movement in the population that was going on. In 1755 a Doctor Webster had made an estimate of the population of the county, parish by parish. According to these not very correct figures the total population was 116,836.⁴ The First Statistical Account—1792—gives the total as 122,921, an increase of about 6,000.⁵ Comparing the sets of figures for the different parishes, so far as they are given, one finds a nearly stationary population

¹ New Deer, First Statistical Account, XI, 185.

² Crimond, First Statistical Account, XI, 409.

³ Sir Archibald Grant, *Essays on Agriculture*, p. 318.

⁴ According to the different parish accounts he sometimes over- and sometimes under-estimated.

⁵ Sir John Sinclair's *Abstract of the Statistical Accounts*, p. 150.

in thirty-two parishes,¹ a definite increase in seventeen, and a definite decrease in twenty-four. The towns of Huntly and Peterhead had an increase of over 5,000.

Many causes partly accounted for this shift of the population. The fisherfolk were tending to move from the fisher hamlets to the newer harbours. The working out of the peat mosses is given as one of the reasons for the decrease in seven parishes in different parts of the county and for the substantial increase in three others.² The failure of the harvest of 1782 proved the last straw to some of the struggling crofts in bleaker districts. The development of the towns, besides causing a direct increase of 5,000 in Peterhead and Huntly, also affected country districts. In twelve parishes the superior attractions of the towns are mentioned—especially both in the less prosperous hilly districts, and, more markedly, close to the towns themselves.³ Peterhead, Huntly and Keith (just over the county boundary) were evidently draining the parishes near by; and round Aberdeen a double ring can be traced, Dyce, Newhills, and Old Machar itself were increasing as factories sprang up. Kintore and other parishes just beyond were feeling the drain, and in Skene and Peterculter the conflicting effects of amalgamated farms and rising industries are mentioned.

There were, however, two very definite groups of parishes, one showing a decrease and the other an increase of population. In the South-west there is an almost compact mass of twenty parishes all showing a decrease. It varies in different parishes from under 100 to more than 500—in Cushnie, and Aboyne and Glentanar it amounted to one-third of the total population—and it totalled for the twenty parishes 4,090. The boundaries of this group almost coincide with the main hill masses of the country—the Grampians and their foothills, which surround the headwaters of the Don and the Dee; and the projecting boss of hilly country that culminates in Benachie. The physical disadvantages of the group lay not merely in a soil that was often poorer than in low-lying districts, but in the climate, for it is the early and late frosts and uncertain harvest that take such heavy toll of Highland crops—and this must have been still more the case when the old, late-ripening varieties of oats were in use. There

¹ Including the rural portion of Peterhead.

² The decrease took place in Ellon, Udny, Keith Hall, Alford, Inch, Towy Bourtie.

³ Near Huntly, Cairnie, Forgue, Drumblade, Auchterless; near Aberdeen, Belhelvie, New Machar, Kintore, Skene, Echt, Drumoak. In the hills, Keig, Alford, Clatt, Auchindoir, Tarland, etc.

are strong indications that depopulation in this group was mainly caused by the failure of the difficult land to supply its population with that rising standard of comfort that an increased contact with the outside world was accustoming them to. The decrease was definitely not due to changes in agriculture, for it is precisely these backward and inaccessible parishes of the South-west that were least affected at the time of the First Statistical Account.

In the North-east there is another group of nine adjoining parishes¹ that all show an increase in population (though three of them, Old Deer, Monquhitter and Fraserburgh, with their growing villages, account for nearly three-quarters of it). These parishes consist of fairly good soil. In the days of difficult land transport they had the great advantage of being accessible to coastwise trade, and they were very advanced agriculturally, which, no doubt, helped to maintain the denser population. But the reasons for the increase given in the different parish accounts were mainly (a) the growth of towns and villages, and (b) the splitting up of the farms, an increase of at least 2,000 people being attributed to this as the principal cause. There can be no doubt that the fundamental cause for these changes was the amazing growth of the linen trade in the district.²

From the foregoing summary it is at least clear that the beginning of the changes in agriculture were not responsible for the considerable movement of the population of the late eighteenth century. As a matter of fact, decrease in population due to the proprietors having taken farms into their own hands, and improved them for reletting at a higher figure, is noted in nine instances.³ The total decrease—and in almost every instance other causes for it are mentioned—is about 1,000, and in the case of Premnay, already mentioned, and Culsalmond,⁴ where a little time had elapsed since the reorganisation, the population had risen to its former figure. If one makes a rough classification of the parishes into three categories, according to the progress of agricultural improvements at the time of the

¹ King Edward, Monquhitter, Aberdour, Tyrie, New Deer, Old Deer, Strichen, Fraserburgh, Pitsligo.

² The linen exported from Aberdeenshire had increased from 41,040 yds. worth £1,539 in 1727 to 137,137 yds. worth £11,551 in 1788. It was largely located in the North-eastern towns and villages. In 1792 Huntly exported 73,150 yards; Rathan spun 38,900 lbs. of yarn, and in Strichen £4,000 worth of linen yarn was sold at the local markets. See A. Warden, *The Linen Trade*, pp. 476, 506, 531, 534.

³ First Statistical Account, IX, 434. The other parishes were Strathdon, Towie, Auchindoir, Cluny, Clatt, Old Meldrum, Forgue, Auchterless.

⁴ Culsalmond, First Statistical Account, III, 240.

First Statistical Account, it is at least clear that the improvements were the cause of no widespread depopulation. Of the most advanced parishes, nine had an increasing population, twelve a stationary one and five showed a decrease. Of parishes less advanced, four were increasing in population, eight were stationary and seven were decreasing. Of the definitely backward parishes, one showed an increase, four were stationary and eleven were decreasing.

Because of the effect of the agricultural changes upon them later on, it may be worth while summarising the position of rural handicrafts at the time of the First Statistical Account. In the most backward hill parishes the people made their own shoes and ploughs, built their own houses, etc.,¹ but in most parts of Aberdeenshire local needs were supplied by local craftsmen, who were "all in some degree farmers,"² as a means of subsidiary livelihood. The crofter weavers of the North-east were a further development of the same type of worker. Near Aberdeen and the other towns the newer type of industrial organisation was developing and factories were being set up.³

There were also two great rural women's industries for the production of exported goods—stocking-knitting, which it is estimated brought £200,000 into Aberdeenshire at this time,⁴ and the rather less valuable flax-spinning for the local linen and thread industries. The immense importance of these subsidiary trades shows how inadequate was the agriculture of the time to maintain the population. In a flourishing parish like Monquhitter, in the North-east, the wife of a subtenant or crofter "commonly pays landlord and merchant by the produce of her cows and by manufacture; and leaves it to the husband, by the sale of cattle and by his work, to furnish bread." In inland districts the women's work was even more universally important. In some parishes the rent day was specially fixed to fall immediately after the Aberdeen stocking merchants had made their periodic rounds.⁵ At Leochel and Cushnie:⁶ "were it not

¹ See Towie, First Statistical Account, IV, 547; Strathdon, *ibid.*, XIII, 171; Glenbuchat, *ibid.*, XIX, 7.

² See Longside, First Statistical Account, XV, 282, and St. Fergus, *ibid.*, XV, 134.

³ Longside, First Statistical Account, XV, 282, gives a very interesting account of the transitional period.

⁴ W. R. Scott, Report to the Board of Agriculture for Scotland on Home Industries in the Highlands and Islands, p. 19.

⁵ Among the parishes where the importance of women's work was specially emphasised were—Clatt, Rayne, Glenmuick, Crathie and Braemar, Tarland and Migvie, Leochel and Cushnie.

⁶ Leochel and Cushnie, First Statistical Account, IV, 173.

that the women make something by knitting stockings, and that the female children are employed in that way as soon as capable, it would be absolutely impossible for them, without assistance, to make a shift to live." It is significant that the six other parishes where the importance of the work is most stressed all lie in the hilly, South-western part. The work was, however, of importance all over the county. It is not exceptional to find five or six hundred pounds being earned annually by the knitters of a parish. As was natural in the eighteenth century, the ministers accepted the prevalence of child labour at this work as a matter of course, but several accounts say that the continuous spinning or knitting made the women "valetudinary," hysterical or weakly; and Sinclair, in his more general account, endorses this.¹

From the different accounts one gets a general idea of how the various classes were situated at the time when the agricultural reforms were beginning. Subtenants seem to have been feeling the pinch of the changes. When rents were raised farmers tended to pass on the difference, and even in districts where their own labour dues had been abolished they were said still rigidly to exact those of their subtenants.² Subleases were not given, and complaints were made that where the subtenant had made improvements he was liable to be displaced without compensation.³ Their rents were generally five shillings an acre higher than those of the farmers, but this included ploughing. They were decreasing in numbers in the North. One minister advises that subtenancies should be discouraged and the cottagers put "in the envied state of small but independent tenants"; but several ministers were strongly against such crofts, and the descriptions of the circumstances of such people are not very favourable.⁴ At Rayne,⁵ which is largely on poor soil, for which something must be discounted, there were an unusual amount of very small holdings, and the cultivators were said to be suffering from a plague of weeds: "Indeed there are too many small crofts; and the occupiers of them are so poor that their cattle have not strength to plow and dress them properly." This parish was specially dependent on women's knitting, and fevers were said to be prevalent there on account of the people's low diet.

¹ Sir John Sinclair, *Abstract of the Statistical Accounts*, p. 147.

² Kennethmont, First Statistical Account, XIII, 66.

³ *Ibid.*

⁴ W. Marshall, *General View of the Central Highlands*, pp. 30, 31; Sir John Sinclair, *Abstract of the Statistical Accounts*, p. 249.

⁵ Rayne, First Statistical Account, XV, 106.

Farm servants were distinctly better off. Their wages had risen from £1 13s. 4d. per annum forty years previously, to £6 or £8 with the same perquisites. Under the old, laborious system large numbers were needed—a man, woman and lad were employed on even a small farm¹—and the rise in the wage bill was a heavy burden. It is surely not merely chance that of the five parishes that complain most bitterly, four were situated in the hilly South-western corner.² The minister of Birse³ writes that the “great disadvantage” that afflicts his parish is “the difficulty of procuring, pleasing and paying farm servants.” Many of the farmers, he says, are “threatened with ruin from this cause,” and “words fail to describe the indolence and behaviour of the servants in general” (he does go on to describe them).

The Accounts record a tremendous rise in the standard of living, especially in the North-eastern parishes.⁴ To quote St. Fergus as but an example: “The manner of living . . . is greatly changed within the last twenty years. The farmers now appear at church and market dressed in English superfine cloth, and many of their wives and daughters in cloaks and bonnets. The manservant is as expensively arrayed as his master, and the dress of the maidservant is little inferior to that of her mistress. The food of the inhabitants chiefly consisted of oatmeal, and sometimes of fish, but these generally salted and dried; owing to this cause the scurvy was a common disease. They used few vegetables, and turnips were often brought by sea from Aberdeen. Every cottager now has his turnips, cabbages and potatoes, and many of the farmers have their mutton, fed by themselves for summer food, and the greatest part of them kill a fed ox or cow for winter provision.” Tea was said to be drunk twice a day in the farmers’ families as a new luxury, and, owing to their having changes of linen clothing, the itch, formerly very prevalent, had disappeared among the country people. They were also becoming more “delicate in their behaviour.” Yet the rise in the standard of living was evidently tending to outstrip the productiveness of the holdings. In one parish in the prosperous North-east⁵ their expensive mode of

¹ Ellon, First Statistical Account. Sir John Sinclair, *Survey of the Northern Counties*, p. 76, gives details showing the employment of the same number of servants on a farm with, apparently, only about thirty acres arable.

² Especially Midmar and Birse.

³ Birse, First Statistical Account, IX, 103.

⁴ Cf. Monquhitter, First Statistical Account, VI, 121; Tyrie, *ibid.*, p. 138; King Edward, *ibid.*, X, 395; St. Fergus, *ibid.*, XV, 134.

⁵ I.e. Rathen, First Statistical Account, VI, 15.

living was said to have "hurt the people very much indeed," and poorer districts evidently felt the rise more severely. At Lumphanan,¹ in consequence, the farmers were said to be putting by less than the servants, and they were said to be hard pressed in four other parishes; at Tough the farms were even being broken up.² The servants, though they were better paid, were said to save less than formerly, and to spend it all on the new fashionable clothes.³

The Second Statistical Accounts were compiled in 1846, just over fifty years later, and the minister of Logie Buchan most fitly summarises the great changes that the new system of agriculture had helped to bring about.⁴ He writes:—

"Being one of the few whom it has pleased God to spare to assist in drawing up a second statistical account of Scotland, I may be allowed more than others to express my satisfaction at the vast improvements in agriculture which have taken place in Buchan since . . . the last account. . . . When I look around me, I seem to live not only among a new race of men but in a new world. Cultivation, like the gradual spreading of a garment, has changed the external face of the earth, and every locality wears a new appearance. The irregular patches and various denominations of arable land which were then interspersed amid the uncultivated wastes, are now absorbed in regular enclosures or extensive fields, the dark expanse of moss is greatly diminished, and the sombre herds of our native brown and black cattle are enlivened by a mixture of the white and speckled Teeswater. The low-thatched farmhouses and long, continuous rows of barns and byres are now converted into slated dwellings of two stories, and adjoining courts of offices; and, where necessary, the steep and rugged tracks that led to them into smooth roads of easy ascent."

He goes on to describe the turnpike roads, and says that he thinks that "the commission of at least heinous crimes is less frequent, and the propensity to low vices less general . . ." and that "a higher tone of morals now prevails." He gives a good general account of the improvements themselves.

Even in the most advanced parishes much had remained to be done. For instance, at Peterhead,⁵ where already there seems to

¹ Lumphanan, First Statistical Account, VI, 382.

² Tough, First Statistical Account, VIII, 261.

³ Cf. Cluny, First Statistical Account, X, 235.

⁴ Logie Buchan, Second Statistical Account, XII, 799.

⁵ Peterhead, First Statistical Account, XVI, 541; Second Statistical Account, XII, 344.

have been more enclosure than almost anywhere else in 1792, "turnips and grass were only partly cultivated. Turnips and grass now form an essential part of the rotations of cropping followed here, and are very extensively cultivated. The arable land was interspersed with bawks or patches between the ridges of waste and uncultivated land. The baulks have now been cultivated, and the land drained and partly enclosed and laid off in regular fields to answer the rotations agreed upon."

One minister describes the change from the old patchwork cultivation to modern enclosures as "fielding." The process had taken place over the whole county with the exception of Glenmuick and, perhaps, Glen-Buchat, both in the South-west. The farms had evidently been consolidated as separate units, though the individual fields had not always been fenced (some of the ministers refer to this latter process as enclosure.)¹ Regular rotations of crops, the field culture of turnips, improved ploughs, the selective breeding of stock, were all but universal among all classes of cultivator. It would be wearisome to repeat the accounts of the changes in parish after parish. At least four claim to have changed more than any other!

The fattening of cattle for the market had already been introduced in two parishes in 1792, and of course depended on the culture of turnips. It had also received stimulus from the introduction of steamer communication with the South. By 1846 it had become the principal source of revenue in many parishes of the North-east,² and the rotation of cropping was specially adjusted to produce an adequate turnip supply.

Two newer improvements—bonedust manure and tile drainage—were equally dependent upon the delimitation of holdings. By the former "thousands of acres of poor land . . . which formerly would not pay for ploughing were at once brought into profitable tillage."³ This improvement made an especial difference to such districts as Central Buchan. The parish of Ellon, for instance, now so beautifully cultivated, was poverty-stricken at the time of the First Statistical Account. By the time of the Second Account it was flourishing, and the amount of bonedust used there "was so great as almost to exceed belief."⁴ Tile

¹ To illustrate this meaning it is necessary to consider individual instances. A privately printed account of the estate of Muchalls (Aberdeen Education Trust) gives a good example.

² Especially Ellon, Second Statistical Account, XII, 899; Logie Buchan, *ibid.*, p. 799; Foucran, *ibid.*, p. 697; Old Deer, *ibid.*, p. 138; Tyrie, *ibid.*, p. 717; Monquhitter, *ibid.*, p. 762; Fraserburgh, *ibid.*, p. 249.

³ Report on the Agriculture of Scotland, prepared by the Highland and Agricultural Society of Scotland, p. 26.

⁴ Ellon, Second Statistical Account, XII, 899.

draining and subsoil ploughing "changed the very appearance and character of whole districts of Scotland."¹ The former made the valley bottoms, often the best land, available for cultivation, and, as the minister of Monquhitter pointed out, the greater dryness of the land made the crops ripen more quickly and be less liable to damage from frosts.

If one were to draw a slanting line across the county (with certain minor adjustments²), dividing the South-west from the North-east, one would almost completely divide the less productive, less advanced and less accessible districts from those in more fortunate circumstances. To the North the fattening of cattle, the use of bonedust, deep drainage and a considerable amount of fencing were usual features; they were exceptional ones to the south of it. Signs of the older system are several times mentioned on the border-line—the infield and outfield could still be traced at Oyne,³ though they had long been cultivated alike. Auchterless had a few old tacks still surviving.⁴ At Drumblade large numbers of children were still employed in herding,⁵ and so on.

Unfortunately no complete returns exist that give the total figures of the results of the new system in increased acreage and productiveness. The information even about the individual parishes is most aggravatingly perverse in refusing to lend itself to exact comparison.

The gains may be estimated in various ways: increased area, larger returns both for cereals and stock, a better quality of both, and a better-balanced system of production. The cultivation of new land is mentioned in forty-nine parishes—nearly five-eighths of the county. For nine of them figures are given, showing a total of 3,712 acres, and therefore averaging about 412½ acres per parish. In others there are vivid descriptions: "At the time of the former Statistical Account . . . a great proportion of the parish was covered with broom, whins and bulrushes. These are now extirpated, and the eye meets with nothing but cultivated and mostly enclosed fields."⁶ Besides taking in new land, the area of cultivation was increased by the draining of swampy patches, the abolition of balks and

¹ Report on the Agriculture of Scotland, prepared by the Highland and Agricultural Society of Scotland, p. 27.

² With the exception of the fertile vale of Alford and of the district round Huntly.

³ Oyne, Second Statistical Account, XII, 624.

⁴ Auchterless, Second Statistical Account, XII, 285.

⁵ Drumblade, Second Statistical Account, XII, 297.

⁶ Cf. Udny, Second Statistical Account, XII, 131.

the squaring of the fields. At Kincardine O'Niel, where five hundred acres were newly cultivated, the total increase in the arable was 1,350 acres.¹ In sixteen parishes some sort of a rough comparison between the eighteenth and mid-nineteenth centuries can be worked out, and the increase amounts to 32,229 acres, an average of 2,014 acres per parish—in Tarves the amount of arable is said to have been doubled. And it must be remembered that under the old system much of the land was outfield and only partly cultivated—the ratio varied considerably, but in Aberdeenshire, in 1792, one-third infield to two-thirds outfield was very usual, although in some parishes the outfield was not included in the estimate of arable land in the First Account. Only one parish records a diminution of cultivation, Aberdour,² where the land brought in during the Napoleonic Wars was being abandoned.

The quality and productiveness of the grain had also gone up. Bear and small oats were no longer sown, white oats and barley had been improved. At Kennethmont the usual return was one and a third more for oats and six times more for barley; at Leslie the improvement was rather less; at Rhynie the total grain crop was said to have been doubled, and at both Old Deer and Glen Muick actual figures are given which show that the total crop had doubled in the former and quadrupled in the latter.³ At Tarves the produce is said to have increased tenfold.⁴

Rather an interesting table of production can be worked out for Kincardine O'Niel (it is to be assumed that the figures represented the ministers' ideas of average production at the two dates).

In 1792 Account.	In 1846 Account.
4,600 acres of <i>oats</i> produced	2,000 acres of <i>oats</i> produced
13,280 bolls, sold at 10s.	14,000 bolls, sold at 10s.
per boll, and made . . . £6,900	per boll, and made . . . £7,000 0
800 acres of <i>bear</i> produced	500 acres of <i>barley</i> produced
3,200 bolls, sold at 12s. per	3,250 bolls, sold at about
boll, and made . . . 1,920	12s. 6d. per boll, and pro-
	duced . . . 2,021 5
110 acres planted with pota-	700 acres planted with pota-
toes and turnips made . . . 600	toes and turnips made . . . 2,800 0
500 acres down with grass,	2,300 acres under hay and
valued at . . . 187	arable pasture, valued at . . . 3,230 0
Total . . . £9,607	Total . . . £15,080 5

¹ Kincardine O'Niel, Second Statistical Account, XII, 831.

² Aberdour, Second Statistical Account, XII, 258.

³ Kennethmont, First Statistical Account, XIII, 66, local information. Leslie, First Statistical Account, VII, 511, Second Statistical Account, XII, 1019. Rhynie, First Statistical Account, XIX, 289, Second Statistical Account, XII, 1015. Old Deer, First Statistical Account, XVI, 469, Second Statistical Account, XII, 138. Glenmuick, First Statistical Account, XII, 215, Second Statistical Account, XII, 772.

⁴ Tarves, Second Statistical Account, XII, 667.

Agricultural reforms were not the sole causes of these changes. "The improvements introduced by the landowners towards the conclusion of the last century were at first but slowly adopted by the tenantry. Depressed by bad seasons and deficient in capital, they had neither the courage nor the means to attempt expensive innovations. The rise, however, in the price of agricultural produce which succeeded the breaking out of the war between this country and revolutionary France, by increasing the capital of the farmers, enabled them to take advantage of the more decided and valuable improvements."¹ The effect of steamer communication on the cattle trade has been noted.

But though agricultural prosperity owed much to outside sources, it had sufficient vitality to weather reactions such as the severe agricultural depression that lasted in Scotland nearly nine years after the Napoleonic Wars.² "Notwithstanding the clamours of agricultural distress, improvements were never carried on here with greater spirit than at present. . . . Farm-houses and offices have been greatly improved in appearance within the last forty years, and the occupants are much better clothed, fed and lodged."³ In only two parishes were there signs of decline—Aberdour, already mentioned, and Lonmay, where "the tide of prosperity is at present ebbing," and there were "low prices for produce—but high rents, high charges for labour and implements. . . . Great industry and the greatest possible frugality are requisite to obtain the means of bare subsistence."⁴ These two parishes were probably affected by the decline of the local linen trade. A more serious outside factor was felt to be the threatened abolition of the Corn Laws. Thus at Bourtie⁵ "two-thirds more of the uncultivated land of the parish would be brought under the plough if the farmers and proprietors believed that the Corn Laws would continue."

Between the two statistical accounts the rôle that agriculture played in the occupational organisation of Aberdeenshire had been profoundly altered. The eighteenth century had seen the rise of rural industries, notably stockings and linen, carried on as joint or subsidiary industries in connection with farming. The early nineteenth century saw the development of specialised urban, factory industries, and agriculture became more completely the sole support of the rural population.

¹ Tarves, Second Statistical Account, XII, 667.

² Report on Agriculture of Scotland drawn up by the Highland and Agricultural Society of Scotland, p. 26.

³ Cf. Fintray, Second Statistical Account, XII, 166; Glenmuick, *ibid.*, p. 772.

⁴ Lonmay, Second Statistical Account, XII, 57.

⁵ Bourtie, Second Statistical Account, XII, 620.

The flax-spinning industry died away early in the century—Huntly, in the previous account called the Paisley of the North, now found its main livelihood from trading with the neighbourhood, Pitsligo was a stagnant place inhabited principally by agricultural labourers,¹ Old Meldrum and Old Deer, according to the First Account expanding linen-weaving centres, had almost given up the industry, and in the rural districts of Turriff, St. Fergus, Crimond—which had owed its main prosperity to the sale of linen yarn²—Longside (woollen industry), etc., the click of the loom and the whirr of the wheel had been almost entirely silenced. The stocking trade had dwindled to insignificant proportions, and the movement of the fisherfolk to the harbours had continued.

The fundamental causes for the change were, of course, the great economic developments of the times—*that* is mentioned in several reports, but the reform of local agriculture was also a considerable factor. Adam Smith points out that the Scots subtenant's and cotter's industries were subsidiary trades: "The produce of such labour comes frequently cheaper to market than would otherwise be suitable to its nature. Stockings in many parts of Scotland are knit much cheaper than they can anywhere be wrought upon the loom."³ In Aberdeenshire spinning mills were not set up till 1810,⁴ but more than ten years earlier, owing to the failure of local supplies, the manufacturers were obliged to get all their yarn from Ross and Caithness—no light task when there was barely a "made" road North of Inverness.⁵ In the more backward districts of the Northern and Central Highlands, and in a few parishes in Aberdeenshire, where the introduction of agricultural reforms happened to come later than the general use of spinning machinery, and supplies of this cheap labour were therefore still available, it was diverted from one trade to another,⁶ but on the whole, the great Scotswomen's rural industries, which had been the mainstay of the poorer

¹ Report on Highland Home Industries, published by the Scottish Home Industries Association, Chapter on Pitsligo Lace.

² Crimond, First Statistical Account, XI, 409.

³ Adam Smith, *The Wealth of Nations*, Bk. I, Chap. X, Pt. I.

⁴ A. Warden, *The Linen Trade*, p. 450.

⁵ Essay by Mr. Mill, Penthill Factory, Aberdeen, printed in the first bound edition of the *Transactions* of the Highland Society, and giving his personal experiences.

⁶ W. R. Scott, Report to the Board of Agriculture for Scotland on Home Industries in the Highlands and Islands, pp. 23, 32; D. Bremner, *Industries of Scotland*, p. 306. An article written by myself on "Highland Rural Industries," *Edinburgh Review*, Jan. 1925, gives a fuller account.

people,¹ died away completely within thirty years, and their decline only caused distress in comparatively few isolated cases.² Agriculture was becoming an adequate source of livelihood for its workers.

The partial survival of the Aberdeenshire stocking industry helps to prove the case. By 1846 it was only carried on in eleven parishes, and there only by the elderly, lone women. Two of these parishes contained large villages that had suffered from the decline of linen weaving; eight were in poor, hilly country; and in three of these latter and in one other parish there was an unusual number of small crofts. Methlic³ is a good example. The average rent per acre there was about the lowest in the county,⁴ and crofts were numerous. In 1792 people "of every age and sex were employed [stocking knitting]. Where other work does not interfere, this enables them to live tolerably well." By 1846 the old women still knitted, but their rates were only about a quarter of those of the eighteenth century. It was the survival of an economic need as much as of an industry. The sale of poultry, eggs, cheese or butter—apart from regular dairy-farming—and of honey is mentioned as being of importance in three of the parishes where stockings were made, and in others of like circumstances where "there is little else of produce to spare for the market." But in one advanced parish⁵ we learn that the farmers could now afford to keep their poultry, and that only the crofters sold them.

Between 1792 and 1841 the population of Aberdeenshire increased from 122,921 to 192,283. The rate of increase was 10 per cent., 15 per cent., 14 per cent. and 8 per cent. at the four decades. The agricultural improvements were being most widely introduced during the first and second decades, and they therefore did not hamper the general increase, but a large decline in the population directly supported by agriculture was going on. In 1801 38,610 persons were employed in agriculture and 13,123 in trades, manufactures and handicrafts; by 1841 the agricultural workers had dropped to 25,224 and those employed in "manufactures, commerce and trade" had risen to 27,923.

¹ In some districts more completely than in Aberdeenshire. See above article, p. 173, Sir John Sinclair, *Abstract of the Statistical Accounts*, and many of the First Statistical Accounts for Perthshire.

² Forming a striking contrast to the distress that followed the introduction of the power loom and the decline of the more urban industry of hand-loom weaving.

³ Methlic, First Statistical Account, IV, 320; Second Statistical Account, XII, 962.

⁴ *I.e.* 12s. 6d. per acre.

⁵ Udney, Second Statistical Account, XII, 131.

As in the earlier account the parishes group themselves, and may be tabulated as follows :—

	In the South-western part of the County.	In the North-eastern part of the County.
Parishes with a decreasing population ¹	8	—
Parishes with a nearly stationary population.	12	6
Parishes with an increase of under 300	12	9
Parishes with an increase of between 300 and 400	6	5
Parishes with an increase of between 400 and 1,000	1	7
Parishes with an increase of over 1,000	—	8

These figures tend to show that productiveness of the soil had a good deal to do with the movement of the population,² but other forces were at work. In five parishes the increase in the population was attributed to factories, quarries, etc., and the towns of Peterhead, Inverurie and Fraserburgh accounted for an increase of 3,916; the parish of Newhills, which was affected by the development of the city of Aberdeen, had an increase of over 1,000.

The development of the villages was largely dependent on agriculture. Those of the North-west, which grew very rapidly until about 1810, owing to the expansion of the linen trade, were able to maintain their population when this industry died away. Under the new economic system they seem to have maintained themselves as distributive centres for the country round. It is more significant that five non-industrial villages were showing healthy development in the poorer parts of the country, for I think it shows not merely that goods were being factory made instead of by the agricultural workers themselves, but that the country people had an increased purchasing power to be able to buy them.

The direct effects of the agricultural improvements seem to have affected the population in different ways. Although the census shows that no large permanent decreases took place, the populations seem nearly always to have declined at the time

¹ In the case of Crathie (Second Statistical Account, p. 646) the decrease was over 950. In a few adjoining parishes, though the decrease noted in 1792 was partly made up, there was an absolute decrease from the population of 1755.

² The connection between productiveness of the soil and density of population is stressed in Sir John Sinclair's *Abstract of the Statistical Accounts* (1825), p. 154 and the Report on the Physical Welfare of Mothers and Children (published by the Carnegie United Kingdom Trust), III, by N. Leslie Mackenzie (1917), see p. 2, and the maps at the beginning.

when the rearrangement of land actually took place. Thus at Daviot,¹ where the rearrangement was recent, the minister notes "a diminished population, produced chiefly by the gradually improved arrangement affected by the proprietors in the division of their lands." After a little time, however, there was generally a rapid rise to more than the former population. In all the parishes where the dates of the agricultural changes, and figures showing the population at ten-yearly periods are given—Logie Buchan, Tarves, Oyne, Echt, Lumphanan and Alford²—this drop and rise can be traced, and there are indications of the same thing in four or five more parishes.

The reclamation of waste land caused an increase of population, especially in those parishes where it was carried out by the settlement of crofts on the new land.³ But, as a set-off against the increased area under cultivation, the new agriculture enabled the work to be done with at least half as much labour per acre (though it was probably more continuously employed), owing to better implements, such as threshing-mills instead of flails, horse ploughs instead of those drawn by oxen, scythes instead of sickles, etc. On the other hand, in some districts, the fattening of cattle led to an increase of labour.

In the North-east of Scotland the yeoman class, which suffered so severely under the English enclosure movement, never existed. The number of landowners' names is given for nearly every parish in both accounts. The same names appear over and over again, but the average per parish was between four and five in the 1792 account, and rather over five in 1846. The increase largely took place near the towns. In the country districts one knows that the boundaries of the big estates were mostly unchanged. The increase in rental averaged two and four-fifths, and was fairly uniform over the county.⁴

Unfortunately it is not possible to estimate the increase of agricultural workers without holdings, for the earlier census returns do not make this classification. As subtenants gave

¹ Daviot, Second Statistical Account, XII, 821.

² Logie Buchan, First Statistical Account, IV, 421, Second Statistical Account, XII, 799. Tarves, First Statistical Account, V, 309, Second Statistical Account, XII, 667. Oyne, First Statistical Account, XV, 105, Second Statistical Account, XII, 634. Echt, First Statistical Account, XIII, 615, Second Statistical Account, XII, 735. Lumphanan, First Statistical Account, VI, 385, Second Statistical Account, XII, 1079. Alford, First Statistical Account, XV, 447, Second Statistical Account, XII, 485.

³ Tyrie, Second Statistical Account, XII, 717.

⁴ The figures for rents can be compared in twenty-three parishes. In Forgue it is shown that the total increase was threefold, but owing to increased cultivation the increase per acre was only twofold.

place to farm servants and day labourers, the increase in this class must have been considerable. There is also no data by which the average size of the holdings at the two periods can be compared.

Of course it is impossible to make even the most superficial comparison of conditions without some little consideration of the movement of prices. At the time of the First Account: "In general the necessities of life are one-third to one-half dearer, and articles of luxury more than double within these forty years."¹ In the same period wages had advanced from £1 6s. 8d. and £1 13s. 4d. to £6 and £8 per annum. Between the First and Second accounts there had been the upward leap of prices due to the Napoleonic Wars, but they had fallen again. Oats and eggs were much as in 1792. Barley fetched more than the old bear; butcher meat had almost doubled. Wages, with food allowance, varied from £14 for the best ploughmen to £8 for an unskilled worker. Rent had almost trebled. On the other hand, less labour was required and it was more productive. Cattle-rearing illustrates the difficulty of striking a balance. In 1792 beasts were worth £3 10s. and sold at four or five years old, but their keep cost but little. In 1841 a fattened bullock was worth £20 to £30 at the end of his third winter, but breeding, feeding and housing him involved a considerable cost that is difficult to estimate. One is thrown back on the general statements of the accounts.

The descriptions of the improved standard of living in 1846 are all but universal, and they are emphatic and categorical, though the condition of farm servants, especially in the North-east, was not so satisfactory as that of farmers. Improvements in the people's food, clothing, manner of life—especially their cleanliness—are dwelt on. In nineteen parishes the improvement in housing is emphasised. In 1792 farmhouses were valued at 16s. to £1 5s., and subtenants' houses at 5s. to 10s. The houses were built of five wooden "couple" stuck in the ground, with a roof tree laid along the top, walls of dry masonry four feet high and a roof of sods were added. The floor was of beaten earth. In 1792 masonry houses were being introduced for farmers as an innovation. By 1841 farmers generally had two-storied houses, and masonry cottages with chimneys were common among crofters. At Keithhall, a parish where the rental of the holdings averaged £14 per annum, the value of the

¹ Cluny, First Statistical Account, X, 235, and Methlie, *ibid.*, IV, 320 give good general accounts.

houses and enclosures rose from £150 to £3,000. Only three accounts criticise the housing—one of them Fraserburgh, with a rapidly growing fisher-town.¹

Although more general causes were also at work, the connection between the improvement in agriculture and the rise in the standard of living is noted in the accounts for sixteen parishes. At Pitsligo the increase in the rents and the people's comfort were "in a proportionate degree"; at Longside there was "an incredible advance in both," and so on all over the county. The abolition of service dues and of multures had, of course, long been universal.

The figures for pauperism are of interest, especially in view of the connection often traced in England between enclosure and the growth of pauperism. In 1846 the old Scots system of voluntary relief, administered by the kirk session, was still universal in Aberdeenshire,² although at Huntly it had had to be supplemented by a voluntary levy among the heritors, and there were signs, especially near Aberdeen, that it was breaking down. A comparison between the two accounts can be made in forty-three parishes, representatively scattered over the county. In these parishes persons in receipt of poor relief averaged 25.63 in 1792 and 33.93 in 1846, an increase of 9.3; but in that time the population had increased by about one-third, so the ratio per head would be lower. The rate of relief had risen from 12s. 9d. per pauper per annum to £1 18s. The parishes show great individual variation. In some the number of paupers is stationary, a few show a decline, others a correspondingly great increase. Perhaps on the whole the tendency to increase is greatest in some of the northern villages. Almost invariably the reason for the increase that the ministers give is that the people are less unwilling to accept charity, but the old women of two parishes were said to be affected by the decline in the stocking knitting.

With material gains there were less tangible losses. The old system of joint cultivation developed a wonderful sociability: "All the intercourse of life was carried on by a kind of tacit agreement, in an interchange of good offices, that would appear extravagant and romantic anywhere else. . . . The ground being all unenclosed, it depended entirely on the good faith and good herding of his neighbour whether a man ever put a sheaf in his

¹ Keithhall, *Second Statistical Account*, XII, 743.

² See A. A. Cormack, *Poor Relief in Scotland*, p. 59, for the account of an individual parish.

barn. The sheep and cattle, too, wandering promiscuously on the hills, the integrity of a man's neighbours was all he had to depend on for their return." ¹ An Inverness-shire account said that the people were becoming too busy and prosperous to wish to play, and in Aberdeenshire they are described as taking to reading books and newspapers, the latter "greedily," and in all but the remotest parts losing their old sports and games and legends and songs and stories.² The ministers do not demean themselves by repeating the lore of fairies, brownies and ghosties that the people had inherited both from their Celtic and Anglie ancestry, but they do preserve some of the stirring local traditions of Aberdeenshire—of feuds by the great families and skirmishes with Highland raiders; of Macbeth's last stand at Lumphanan; and the Bruce's bitter "herschip of Buchan"; how Donald of the Isles swept southwards with ten thousand Highlanders, and was held at the bloody battle of Harlaw that set half Scotland mourning; of Mary Stuart's spirited little campaign by the Hill of Fare; and how Montrose four times passed through the county on his lightning marches and fought two pitched battles within it; of the Jacobite risings of the '15, which specially concerned Aberdeenshire, and the '45, both handled most gingerly in the First Account.

Only those who have tried to collect the old local traditions know how utterly their glamour has passed from the lives of the Scots country folk.

I. F. GRANT

¹ Mrs. Grant of Laggan, *Superstitions of the Highlanders*, I, 73.

² St. Fergus, Second Statistical Account, XII, 185, gives an amusing example of the gain and loss due to new ways. The people were said to be able to drink tea twice a day, but the ancient game of "gowff" on the links had almost died out!

THE POTTERIES IN THE INDUSTRIAL REVOLUTION

EXTRAORDINARY advances in technology and in the scale and methods of industrial enterprise mark the economic history of England in the eighteenth century. The mechanical inventions in the textile trades and the consequent rise of the factory system constitute a familiar story. But a complete understanding of this period of industrial revolution waits upon the production of detailed studies of particular industries. Hence our gratitude to Mr. Ashton for his excellent study of the Iron and Steel Industry. The development of the Pottery Industry during this same period has generally been neglected by the economic historian, though its development is sufficiently different to warrant attention, and though the Wedgwood MSS. at Etruria contain very interesting records of an eighteenth-century business enterprise.¹ The revolution in the potteries consisted in the discovery by constant experiment of new bodies, new glazes, new methods of decoration; a greater division of labour, a growth of the factory and the development of methods of control, *i.e.* the beginnings of scientific management and cost accounting; the improvement of transportation and the opening of new markets at home and abroad. In the technological revolution in the potteries there are important peculiarities; but the manufacturer who emerges is of the same genus as the Cotton Lord of Manchester, or the Iron-master of Birmingham, as witness their association in the General Chamber of Commerce (1784-6).

Some of the causes of this revolution may be examined. The main economic force was the growth of the market. With the improvement of transportation, the increasing command of foreign and colonial markets won by the merchant class, and the growing wealth and luxury of the metropolis, the demand for

¹ Not that the history of the potteries remains unwritten. The works of W. Burton, A. H. Church, L. L. Jewitt, E. Meteyard, J. C. Wedgwood, and many others provide a mass of material. It is the object of this article to interpret the history of the potteries in the light of the general economic history of England in the eighteenth century. The writer wishes to express his thanks to Major Frank Wedgwood for permission to work in the Wedgwood Museum at Etruria, and to Mr. Cook, the Curator, for his courtesy. This work has made possible some illustrations of the business development of the potteries.

all goods increased. But the new demand for pottery involved a change in fashion. Early in the seventeenth century Oriental porcelain began to displace pewter and plate from the tables of the very rich. This was soon followed by Delft ware—a Dutch imitation of porcelain—which was available to the middle class. The introduction of the fashion of tea and coffee drinking favoured the extended use of earthenware. The readiness of the industrial response to the stimulus of increased demand deserves some explanation. There was, of course, a tradition of craftsmanship in North Staffordshire going back many centuries, the skill of the early potter being proved by the excellence of the mediæval encaustic tiles. Moreover, like the Lancashire cotton men, the potters were free from the “obstructive inertia” of Gild control. There was, too, a social predisposition to innovation, which found expression in countless reform agitations and in the progress of rationalism in all the sciences. Perhaps the most important factor was that the diffusion of ideas was facilitated by the improvement of communication. Seeing that the fashion of using earthenware for the dinner-table was borrowed, it is not surprising that improvements in potting technology owed much to foreign potters; driven from their own country by religious persecution, they settled in London, where there was an excellent market and where they could procure the same English clays which they had previously imported. Thus a thriving manufacture of Delft grew up in the seventeenth century at Lambeth, Liverpool and Bristol. But Delft had little direct influence on North Staffordshire; its contribution was rather the development of a market, out of which it was later ousted by the new Staffordshire ware. It was Rhenish stoneware which most directly influenced English technical development, and exemplified best the diffusion of technology. This ware had been imported on a large scale since the time of Elizabeth. Its manufacture was early attempted in England, but John Dwight of Fulham seems to have been the first successful manufacturer. He took out patents in 1671 and 1684. In 1693–4 there was a suit in Chancery brought by Dwight against John and David Elers of Fulham, James Morley of Nottingham, Aaron, Thomas and Richard Wedgwood of Burslem, and Matthew Garner, for breach of his patent rights. This shows close communication between Staffordshire and London: Matthew Garner, a Staffordshire lad, had been apprenticed to a Southwark potter; the Wedgwoods supplied clay to the Elers of Fulham; and already stoneware was made in Staffordshire. Later, John Philip Elers

went to Staffordshire to be near the supply of his clay; in spite of his efforts at secrecy, the local potters learned much from him in the way of careful refining of the clays, the use of the lathe for finishing the ware, etc. Elers brought a refined taste into a centre of crude manufacture. How slow the diffusion of useful ideas might be is illustrated by the case of copper oxide—its colouring properties were known and used throughout England in the seventeenth century, but not till the middle of the eighteenth did the Staffordshire potters employ it. However, the new technology was not borrowed wholesale; progress was mainly dependent on experiment with the new ideas and new materials added to the old. The growing market provided the incentive; the increase in the scale of enterprise and the high profits gained made experiment possible.

Of the state of the industry at the end of the seventeenth century we have an admirable account in Dr. Plot's *Natural History of Staffordshire* (published in 1686). "But the greatest pottery they have in this country is carried on at Burslem, where for making their several sorts of pots they have as many different sorts of clay, which they dig around about the town, all within half a mile's distance, the best being found nearest the coal; and are distinguished by their colours and uses as followeth :

1. Bottle clay of a bright whitish streaked yellow colour.
2. Hard fire clay of a duller whitish colour, and fuller interspersed with a dark yellow, which they use for their black wares, being mixed with the
3. Red blending clay, which is a dirty red colour.
4. White clay, so called, it seems, though a blewish colour and used for making a yellow coloured ware, because yellow is the lightest colour they make any ware of.

All of which they call 'throwing' clays, because they are of a closer texture and will work on the wheel."

Though confined to local clays the Staffordshire potters had considerable variety; but it is interesting to see that their desire for a white body had to be satisfied with a name. Besides the clay, they had at hand the other materials of their craft, coal and lead. Coal was got with great ease from near the surface, the potter generally digging his own coal as he dug his own clay. As the industry made greater demands on the coal they had to dig open pits, and got into trouble with water. The cutting of a gutter usually solved the problem. Lead ore was obtainable

at Lawton Park, six miles from Burslem; it was sold at that time to the potters at £6 a ton.

The typical pottery consisted of a small thatched cottage with lean-to working sheds covered with sods, and an oven of a coped form some eight feet high and six feet wide, surrounded by a hovel of sods to conserve the heat. For the preparation of the clay there would be a tank or "sunpan," about twenty feet square and eighteen inches deep. In a corner, partitioned off, was a smaller deeper vat, where the clay, after due exposure to the weather, was "blunged," *i.e.* beaten about in water by a man with a huge oar. The large stones fell to the bottom. The mixture was then run into the sunpan, through a sieve, to a depth of about four inches, and there left to evaporate by the heat of the sun. When dry, more was added from the blunging vat till the clay thus dried was a foot or more thick. It was then cut and stored for use in a damp cellar. Before using the clay another process, called "wedging," was necessary to drive out air bubbles. The piece of clay was cut in two with a wire, then one piece was lifted above the head and brought down with as much force as possible upon the top of the other. This was repeated many times. After which they kneaded it like dough, and made it into balls proportioned to the size of the piece to be made. The potter then formed his piece on the wheel. The pieces were set outside to dry, or in foul weather by the fire. When dry, the handle was put on, and they were decorated by painting with liquid clay of a different colour, run on through a quill. For the glaze they dusted the ware with "smithum," *i.e.* lead ore beaten into dust and finely sifted. The ware was then ready for the oven, the coarser ware being exposed to the naked flame, the better ware placed in saggars—"metall'd pots of marle." The oven was generally fired once a week: fired on Friday, last stoking early on Sunday morning, then allowed to cool ready to be drawn on Monday morning. The ware was sold straight from the oven to the travelling cratemen, who gave tallies for the amount. The cratemen loaded the ware into the panniers of their asses and filed away. In such a works there would be six or eight men and boys. There would be separate sheds for the thrower, the stouker, the decorator; but the division of labour was not carried far, every workman being competent to do any part of the work.

Dr. Plot's account, from which the above is derived, can be supplemented by a document in the Wedgwood MSS., which describes the size of the industry and the scale of the individual

works. In a letter to Lord Auckland, dated 1792, Josiah Wedgwood gives the result "of having examined some of the oldest men in the pottery here, near thirty years ago, who knew personally the masters in the pottery and very nearly the value of the goods they got up, fifty years before that. From these data I can pretty nearly ascertain the annual value of the goods made here at that time: which was something under £10,000 a year." He continues:

"Men necessary to make an oven of black and mottled per week, and other expenses:

	£	s.	d.
6 men, 3 at 4s. a week, and 3 at 6s.	1	10	0
4 boys at 1s. 3d.		5	0
1 cwt. 2 qrs. Lead Ore at 8s.		12	0
Manganese		3	0
Clay, 2 cart-loads at 2s.		4	0
Coal, 48 horse-loads at 2d.		8	0
Carriage of do. at 1½d.		6	0
Rent of Works at £5 per ann.		2	0
Wear and tear of Oven, Utensils, etc., at £10 p. a.		4	0
Straw for packing		1	0
The master's profit besides 6s. for his labour		10	0
	4	5	0

"N.B.—The wear and tear, master's profits and some other things are rated too high. £4 per oven-full is thought to be sufficient for the black and mottled works of the largest kind upon an average, as the above work was a large one for those times."

There follows a list of the pot works in Burslem about 1710, forty-three in all, producing a total of £140 of ware a week. The works varied from a weekly output of two to six pounds. Whether we look at the scale of the industry or the quality of the product, we feel justified in describing it as a "peasant industry."

The first step towards the transformation of the industry was the discovery of a white body, which the metropolitan and foreign markets demanded. Increasing communication with other centres led to a trial of clay imported from other districts. Crouch clay from Derbyshire, used by the Nottingham potters, was the first importation. This was soon superseded by clays from the south of England, first the pipe clay of Devon, then the superior tertiary clays of Dorset and Devon. News of these clays may have come from London, where Poole clay had long been sold. It was a considerable venture to use such distant clays when transportation was undeveloped. The clay was

shipped from Bideford to Chester, and carried thence by land. The improvement of the Weaver Navigation in 1720 made it possible to bring the clay by water to Winsford in Cheshire; pack animals carried it over the execrable roads and returned with crates of ware. The clay being expensive was first used as a white slip to cover the dull body, thus taking the place of the tin enamel on Delft ware. Soon after 1720 Thomas Astbury, of Shelton, added calcined flint to the Devonshire clay and made a body white all through. Here there is a bifurcation in the development according to the method of glazing. The first makers of this new ware used the traditional lead glaze of the district. But, as this imparted a yellow tint and partially spoilt the whiteness of the body, a later group of potters applied to this new body the method of salt glaze used for the brown stoneware. This proved a great success; by 1750 there were sixty small factories making it for a wide market, including Holland, the American Colonies, and the West Indies. Then the trade died; about 1760, according to Dr. Aikin, "this ware began to be rejected from genteel tables." The main line of development was via lead glaze. First the lead was more carefully prepared, then, in place of dusting the lead on, the ware was dipped in a thin slip of flint and clay mixed with lead; finally, Enoch Booth, of Tunstall (c. 1750), introduced the modern method of two firings, a preliminary or "biscuit" firing before the ware was dipped, then a second "glost" firing. This process proved simpler and more tractable than the salt glaze and was therefore cheaper; in addition, it was superior for the purposes of dinner ware because of its smoother surface. It was this new Cream Colour ware that Josiah Wedgwood took and perfected under the name of Queen's Ware. In 1767 Wedgwood wrote: "The demand for this said Cream Colour, alias Queen's Ware, still increases. It is really amazing how rapidly the use of it has spread over the whole globe." Cream Colour was the basis of the prosperity of the potteries. During the latter half of the century Josiah Wedgwood, John Turner, Josiah Spode, William Adams and a host of others were experimenting constantly with new clays—china clay and china stone from Cornwall being the most useful later addition. Lack of space makes impossible any mention of the development of other bodies in the second half of the century, basaltes, jasper, bone china, etc.

While the body and the glaze were thus improved, new methods of making and decorating the ware added to its chance of commercial success. The use of the lathe to give a more perfect

finish to the article taken from the wheel had been learnt from John Philip Elers. Two new methods, pressing and casting, made possible a great variety of shapes. Moulds, or blocks, were cut in alabaster, and from these were made "pitcher," *i.e.* porous clay moulds, which were the working moulds and were renewed as they wore out from the alabaster block. Pressing is the method of shaping pieces of pottery by pressing thin cakes of clay into these pitcher moulds. For casting the clay was run into the mould in a liquid state, and after a few minutes run off again, leaving behind a shell of clay adhering to the mould, which was taken out when dry. About 1745 Ralph Daniel, of Cobridge, introduced plaster of Paris for making the blocks and working moulds. The making of blocks soon became one of the most important parts of the potter's craft; mostly the master potters made their own, but Aaron Wood was a distinguished specialist block-cutter working for many masters. Improved methods were not enough, they had to be directed by a superior artistic sense. Josiah Wedgwood, commenting on the state of the industry when he was beginning (*c.* 1750), writes: "White stone ware was the principal article of our manufacture. But this had been made a long time and the prices were reduced so low that the potters could not afford to bestow much expense upon it, or to make it so good in any respect as the ware would otherwise admit of. . . . And with regard to Elegance of form, that was an object very little attended to." Wedgwood and his contemporaries raised the standards of artistic as well as technical achievement.

In decoration a similar advance is seen. Two Dutchmen settled at Hot Lane and began to enamel Staffordshire ware, reproducing the designs of Oriental porcelain. They tried to keep their methods secret, but Ralph Daniel brought in enamellers from the centres of the old Delft and the new china manufacture, Bristol, Chelsea, Liverpool and Worcester. Enamelling located at Hot Lane as a subsidiary trade to the potteries. Josiah Wedgwood sent his early ware to Mrs. Warburton of Hot Lane for decoration; later he had his own establishment for enamelling at Chelsea. The method of transferring a printed design to earthenware, invented by Sadler and Green of Liverpool in 1755, gave an alternative decoration for the cheaper ware. Later the two methods were combined, the painter filling in an outline laid by the printer. At the end of the century the invention of blue printing under the glaze provided a decorative plate at a very moderate cost, making the fortune of Josiah Spode and others.

But, again, all depended on the artistic sense of those who directed these new methods. Wedgwood selected a staff of competent artists to cut his blocks and make his designs. He set a high standard, and his competitors rose to it.

Invention was busy in the whole field of pottery; a local mechanic named Alsager improved the potter's wheel. "A boy turns a perpendicular wheel which by means of thongs turns a small horizontal one just before the thrower" (Arthur Young). Ralph Shaw of Burslem invented the process of drying his clay on a shallow kiln heated by flues running underneath, a great advance on the primitive sunpan. The method of grinding flints was revolutionised by Thomas Benson, a London house-painter, in 1726. When ground dry the dust had been so noxious that it became difficult to get labour for grinding. Benson eliminated the dust by grinding the flints in water, applying his knowledge of colour grinding to the problem of the potteries. His first specifications called for iron balls, but when this was found to cause impurities, stones were substituted. The bigger potters ground their own flints; the majority bought flint in slip form from the mills which sprang up near-by in the Modder-shall valley. The oven came in for improvement too. When Wedgwood started on his own at the Ivy Works (1759) he pulled down the ovens for some slight improvement, and then pulled them down again for further alteration. As the potters strove to improve their ware they realised the importance of accurate control of heat of the oven. A series of inventions for measuring high temperatures were made; in 1740 John and Thomas Wedgwood introduced their "pyrometric beads," which recorded changes of temperature by colour change. Other attempts to deal with this problem were made by Whitehurst (1749), Ellicott (1750) and Smeaton (1754). In the correspondence of Josiah Wedgwood there is constant reference to this difficulty. "In a long course of experiments for the improvement of the manufacture I am engaged in, some of my greatest difficulties and perplexities have arisen from not being able to ascertain the heat to which the experiment pieces had been exposed." This difficulty became more important as he came to the more delicate ornamental wares. Wedgwood tried measuring heat by colour change, then by expansion. He achieved such a measure of success that he was elected a Fellow of the Royal Society. It would be interesting to examine the relation of technological progress in the eighteenth century to the progress of pure science. Josiah Wedgwood, the leading master potter, corresponded with Dr. Darwin and Joseph

Priestley; but his debt to them was rather for their encouragement in constant experiment than for directly useful information.

The technological revolution in the potteries presents a strong contrast to the mechanical revolution in textiles. The product was never completely standardised. Though the correspondence of Wedgwood shows him alive to the advantages of standardisation, the tendency was opposed by the character of the market and the character of the process. Skill remained predominant: in 1798 direct labour cost at Wedgwoods' was 40 per cent. of the value of Useful ware, and 67 per cent. of the value of Ornamental. The new ideas, not being embodied in machines, were difficult to patent. And there was little of that mechanical compulsion to proceed from invention to invention, as when the improved loom called for more yarn and thus for improved spinning machinery. But, when the introduction of flint necessarily led to Benson's invention for avoiding the noxious dust, or when the increasing delicacy of the work made necessary accurate measurement of temperature, here too was "invention the mother of necessity." In the prevailing spirit of invention and experiment, and in the development of business organisation, Burslem, Birmingham and Manchester are alike.

The expansion of the market led to production on a larger scale. The first recorded effort at enlarging the output of the works took the form of building a bigger oven, which to the delight of the conservative potters collapsed. Soon manufacturers began to build a row of ovens; the Baddeleys excited jealous ridicule by building a row of four ovens; while in 1743 Thomas and John Wedgwood gave greater cause for scorn by not only building a works with five ovens, but even going to the ridiculous expense of covering it with tiles. In spite of this wild extravagance they were able to retire, in 1760, with a comfortable fortune. Of the size of the typical pottery, and of the scale of the industry, there are various estimates. In a petition for a Turnpike Act (1762): "In Burslem and its neighbourhood are near 150 separate potteries for making various kinds of stone and earthenware, which together find constant employment and support for near seven thousand people. The ware from these factories is exported in vast quantities from London, Bristol, Liverpool and Hull to our several colonies in America and the West Indies, as well as to almost every port in Europe." An account of Arthur Young in 1769 gives, I believe, an over-estimate of the number of works and an under-estimate of their average size: "I had the pleasure of viewing the Staffordshire

Potteries at Burslem and the neighbouring villages, which have of late been carried on with amazing success. There are 300 houses, which are calculated to employ upon an average twenty hands." From Josiah Wedgwood there are several estimates : in *The Case of the Staffordshire Manufacturers*, during the opposition to the extension of Champion's patent (1775), Wedgwood gave the annual exports as £200,000. In 1785, before a Committee of the House of Commons, he stated that 15,000 to 20,000 men were employed. In the letter, previously quoted, to Lord Auckland, he gives £300,000 as the total product of the district. In another place he gives the potter's average weekly consumption of coal at ten tons; from comparison with his own accounts this would seem to indicate an average annual product of £5000. An average leaves much untold; no doubt there persisted many small works, but there also developed many big ones. The three potters who gave evidence before the Committee on the Orders in Council (1812) were all large-scale producers. In spite of the loss of European markets, Wedgwood's sales in 1810 were £43,474, and he employed 478 wage-earners. Mr. Hamilton had reduced his staff from 400 to 210, Mr. R. Stevens from 150 to 100. Expansion by buying up other works is also obscured by an average, *e.g.* William Adams of Stoke had five works.

A most realistic picture of the state of business development towards the end of the eighteenth century is presented in the surviving business papers of the firm of Josiah Wedgwood. One of these papers gives a detailed statement of the financial results of trading for the first half of 1798. A summary of this follows :

Manufactory Useful.

Produce.

Charges.

	£		£
Sales at Etruria . . .	6,347	Wages	3,067
Sent to London . . .	4,254	Coals	997
Sent to Liverpool . . .	121	Clay	315
Sent to Enamel Works . .	642	Flint	455
		Lead	380
	11,364	Packages	375
Less discount	1,603	Carriage	432
		Incidental	145
Net Produce	9,761	Goods bought	119
Charges	7,706	Rent	201
		Proportion of general charges . .	244
Profit	£2,055	5% on account produce for	
		charges not yet brought in . .	488
		5% for subsequent loss . . .	488

£7,706

Manufactory Ornamental.

	£
Net Produce . . .	1,591
Charges . . .	1,516
	<hr/>
	£75

The Useful and Ornamental branches do each other's business, and the balance is in favour of the Ornamental. From London it appears that the increase in stock is chiefly in articles Ornamental. Therefore this branch appears to be carried on without profit.

Enamel Works.

	£
Net Produce . . .	2,398
Charges . . .	1,503
	<hr/>
Profit . . .	£895

Total Profits £3,025. Total Debts £7,539. Debts received £7,370.

	£
<i>London Warehouse.</i> Sales	8,543
Ready money	2,005
	<hr/>
Debts in London	6,538
Received for debts	9,211
	<hr/>
Decrease in debts	2,673
	<hr/>
Income of Warehouse :	
20% on Useful ware ; 40% on Ornamental and Enamel	2,308
Charges	1,903
	<hr/>
Profit	405
Increase of Stock, less 9% for expenses of sale	864
	<hr/>
Total Profit	£1,269

This gives a total profit for London and Etruria of £4,294. But the increase of stock is too big, so write off £372, leaving a profit of £3,922. Set aside reserves.

	£
Useful	976
Ornamental	159
Enamel	180
London	427
	<hr/>
	£1,742

These accounts speak for themselves; they show a pottery of considerable size conducted on modern business principles. Accurate record was kept of costs, and the case of the Ornamental branch subjected to close scrutiny. A letter of 1776 had shown Josiah Wedgwood "puzzling his brain all the last week to find out proper data and methods of calculating the expense of manufacture, sale and loss, etc., to be laid upon each article of our manufacture."

Some comment on the London Warehouse is called for. The

simple method of the peasant potter selling straight from the oven to pedlars had given way to newer methods; the potters had become merchants. They began soon after 1720 to establish business relations with London, Liverpool and Manchester, consigning goods to general dealers in these towns. They then entered the foreign markets already opened by the merchants of these towns. They adopted the custom of the more developed trades of sending "riders out"; but the early rider kept no accounts, simply emptied his pockets on his return, deducted his wages and handed the remainder to his master. As the industry grew, business methods developed. Wedgwood had his London Warehouse, which became a fashionable lounge. Turner had a depot in Holland, with a staff of native painters to decorate the ware in the native style. In their market fashion meant much, and Wedgwood was successful in securing such distinguished patronage as turned fashion in his direction. "If royal or noble introduction be as necessary to the sale of an article as real elegance and beauty, then the manufacturer, if he consults his own interest, will bestow as much pains and expense too in gaining the former of these advantages as he would in bestowing the latter." Along with that of the other new trades their market was limited by foreign tariffs, and the master potters are found co-operating with Birmingham and Manchester to open new foreign markets by commercial treaties, *e.g.* the Eden Treaty with France, 1786.

Above all they needed cheap, easy transportation. Wedgwood was the keenest promoter and the Treasurer of the Grand Trunk Canal. Without this new method of bringing in their bulky materials and sending out their fragile ware the potteries could not have developed as they did. The improvement of communication was also of importance to business: in 1740 mail was brought to Burslem every Sunday from Newcastle; by 1760 it was brought three times a week by a man on horseback from Stone; in 1802 there was a daily mail to London and Liverpool. There were daily coaches from Burslem and Hanley to London, Liverpool, Manchester and Birmingham. There were also a large number of stage wagons, Twiss and Wakeman being the two important carriers. The following letter shows the terms on which Wedgwood exported:

"I beg leave to acquaint you that being a manufacturer only in an inland county I do not send my goods abroad on risque, but my foreign correspondents name me a house in England to accept my draft on my sending that house bill of lading of the goods being shipped, and that house being my guarantee, when the order is given it is executed without loss of time. I shall be glad if this

mode of dealing may be convenient to you, but if not, when you send me a bill of exchange, I will as soon as it is accepted dispatch your goods to the amount. I deduct discount of 15 per cent. for prompt payment, and I pay the carriage to Hull, but not the expenses of shipping."

A good deal of credit information about customers was exchanged between Birmingham and Etruria.

Turning from finance and sales to the internal organisation of the factory, we find a minute division of labour, and the development of factory discipline and control. Here Wedgwood learned much from Matthew Boulton. An account of the hands employed in the Useful branch of the Etruria works in 1790 illustrates the degree to which specialisation had gone and gives interesting data on wages earned.

Slip House.	Looker over 14/-. Man to clean and break clay 8/-. Four slip makers 10/6. One slip maker 12/-. Boy 5/-.
Clay Beaters.	Two men 11/6.
Throwers.	Three apprentices 3/6, 17/-, 18/-. Three boys to make balls 2/6, 4/6, 5/-. Three boys to turn wheel 2/-, 2/9, 4/-.
Platemakers.	One man 7/-, eight on piece-work. Three boys 2/-, 2/-, 1/-. Six boys paid by the men.
Dish Makers.	Inspector 18/-. Two men piece-work; one man 9/-.
Hollow Ware Pressers.	Five men on piece-work. Three apprentices on piece-work. Three boys paid by the men.
Turners of Flat Ware.	Seven men, piece-work. Six boys paid by the men.
Turners of Hollow Ware.	Three men, piece-work. One man 10/6. Three apprentices 2/-. Seven children to turn lathes, 2/6—4/-.
Handlers.	One inspector and handler 10/6. One piece-worker 15/-; one 2/9. Boy to make spouts 1/-. Two apprentices 2/6.
Biscuit Oven.	One fireman, piece-work. Four men 12/-. One to get in coal 8/-.
Glost Oven.	Two dippers 12/- and 15/-. Three brushers 1/3, 2/-, 2/3. Two placers and firemen 18/-. Two boys paid by the men. One boy 4/6.
Glost Warehouse.	Inspector and repairer 10/-. Girl assistant 3/-.
Enamelling and Painting.	Two girls colour grinding 5/-, 2/9. One man painter 16/-. Three girls, painters, 2/9, 6/-, 6/-. Two apprentices 2/-. Enamel foreman 10/-. Two gilders, piece work.
Getter in of Coals for Workhouses.	8/-.
Four Odd Men.	4/-, 7/-, 9/-, 9/-.
Warehouse.	Superintendent and looker-out 18/-. Two lookers-out 10/-, 14/-. Three dressers and sorters 6/6, 9/-, 9/6. Two carriers 3/-. Four packers 9/-.
Counting House.	Three men and two apprentices.

One modeller, one mould-maker 12/-. One looker after moulds 15/-. Two sagger makers, piece-work. One cooper 12/-. Two in lodge 12/-, 2/-. Two inspectors, one looks after ware, the other after wages, etc.

The total number of employees in this branch was 160. A similar account for the Ornamental branch shows 110 workers,

and the various departments, jasper, black, etc., have their special staffs. The division of labour had been carried far. Two memoranda dealing with the duties of the porter and certain disciplinary regulations complete this account of the factory.

"Business of a Porter. From Lady Day to Michaelmas.

Ring bell 5.45.

Chime 6-6.10 a.m. admonish those who are not at work at that hour.

6.20 ,, shut door till breakfast time, take book around and check attendance.

8.30 ,, bell for breakfast.

9.00 ,, a little before, bell for work again. Admonish after 9.10, shut door at 9.15.

Porter to have meals at the same time as the men, a clerk taking his place.

Might have a system of tickets to save porter going round works, or list of names in the lodge and the porter marks with chalk.

If working overtime, 6-6.30 p.m., supper.

Michaelmas to Martlemas. The first bell is to be $\frac{1}{4}$ of an hour before they can see to work, and the last bell when they can no longer see.

The porter is to weigh coals, marles, straw, etc. To deliver brushes, files, caskets, candles, oils, etc. to the workmen.

"The firm must keep a stock account and a sales account, into which every article sold, though ever so trifling, is to be entered. There is to be a money till in the table into which the money must be put, never into his pocket. The stock and sales books are to be frequently compared in particular articles, and a general stocktaking in the Christmas holidays."

"Some regulations and rules made for this manufactory more than thirty years back (1810).

Any person seen throwing within the grounds of the manufactory to forfeit 2/6.

Any person leaving a fire in their rooms at night to forfeit 2/6.

Any workman leaving scraps in their rooms, so as to get dirty, to forfeit 2/-

Any workman striking or otherwise abusing an overlooker to lose his place.

Any workman conveying ale or liquor into the manufactory in working hours, forfeit 2/-.

Any person playing at fives against any of the walls where there are windows, forfeit 2/-."

The "new discipline" seems to have been mitigated by an occasional game of fives.

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THE DOMESTIC SYSTEM IN THE EARLY LANCASHIRE TOOL TRADE

IN a chapter of his Autobiography James Nasmyth, the engineer, describes the organisation of the metal trades of West Lancashire in the 'thirties of last century, and refers, in particular, to the firm which is the subject of this article.

"The 'P S,' or Peter Stubbs' files, he says, were so vastly superior to other files, both in the superiority of the steel and in the perfection of the cutting, which long retained its efficiency, that every workman gloried in the possession and use of such durable tools. Being naturally interested in everything connected with tools and mechanics, I was exceedingly anxious to visit the factory where these admirable files were made. I obtained an introduction to William Stubbs, then head of the firm, and was received by him with much cordiality. When I asked him if I might be favoured with a sight of his factory, he replied that he had no factory, as such; and that all he had to do in supplying his large warehouse was to serve out the requisite quantities of pure cast steel as rods and bars to the workmen; and that they, on their part, forged the metal into files of every description at their own cottage workshops, situated in the neighbouring counties of Cheshire and Lancashire."¹

Here is testimony to the hold which the factory system had obtained in English industry. Familiar as he was with great iron-foundries and engineering works, Nasmyth regarded a large physical unit of production as typical, and was accordingly "surprised as well as pleased" to find in the smaller metal trades so different an order. In the textile area of South-east Lancashire the domestic system had been rapidly superseded by the factory system; in the west of the county domestic production had thriven for centuries, still flourished, and was destined to survive, in a somewhat attenuated form, it is true, to the present day.

¹ James Nasmyth, *Engineer, an Autobiography*, ch. xii. Nasmyth mis-spells the name. Peter Stubbs was no relative of the Stubbs who, upon being knighted, is said to have written his name St. Ubbs!

During the eighteenth century, as now, the metal industries tended to congregate on the coal-fields; and where, as in Lancashire, there was little production of iron and steel these were brought in from other districts.¹ Steel was purchased for the tool-makers of this area from Sheffield and Newcastle-on-Tyne, where crucible cast steel was made from charcoal-iron brought overseas. In the second half of the eighteenth century district specialisation had been carried far: watches and watchmakers' tools were made at Liverpool and Prescot, nails at Chowbent (Atherton) and Leigh, pins, files and wire at Warrington, and locks and hinges at Ashton-in-Makerfield. Possibly as a result of its geographical position, the last of these towns had become a commercial centre for the metal area, which extended north as far as Wigan, south to Warrington, east beyond Leigh, and west to Liverpool: it was through dealings with Ashton merchants that Peter Stubs was enabled to rise to the position of a large manufacturer.

The earliest records of the firm consist of four small memorandum books, and it is clear from these that Peter Stubs was then a craftsman working, with a single apprentice in a small shop in Warrington, to the order of wholesale ironmongers. Between January 23 and February 20, 1777, he cut 30 dozen watch files of various sizes for William Barrow of Prescot: these were priced at £3 19s., but a trade discount of 25 per cent. was allowed, so that Stubs actually received £2 19s. 3d. Between April 10 and July 2 he made 72 dozen, for which he received £10 8s. 6d., less 25 per cent.—payment being made in three instalments—and so on throughout this and the following four years. At the same time similar relations existed with Chorley and Leech of Ashton, who, like William Barrow, supplied the filemaker with steel. In both cases the steel was purchased: Stubs was debited with its value and credited with the finished files, which were delivered to the ironmongers by post or by the hand of the apprentice. The accounts are very roughly kept, and it is not possible to make an estimate of Stubs' income; but it was certainly small, for his wife Mary washed each week shirts (at 2d. each) and stocks (at ½d.) for Thomas Sutton, who, with his wife, lodged in Stubs' house for several months. Since the entries relating to steel cease in 1780, it seems possible that Stubs now bought it from others; instead

¹ It is not surprising, therefore, that when the question of free importation of pig-iron from the American colonies was debated in 1750, the "Ironmongers, Hinge-makers, Nail-makers, Lock-makers, Hoe-makers and Smiths in Ashton, Chowbent, West-Leigh and Warrington" petitioned in favour of the proposal. *Commons Journal*, XXV. 1098.

of receiving payment by instalments as the work proceeded, he waited till the order was complete and was paid by bill. In 1781 he had orders from Chorley and Harrison, and in the following year from Peter Atherton of London; though these were small compared with those given by the Prescott and Ashton firms, it is clear that he was beginning to exercise rudimentary commercial functions.

From this point there is a break of six years in the records, and when Peter Stubs again comes to view he is the prosperous landlord of the "White Bear" Inn of Bridge Street, Warrington. He buys barley and hops, owns malt kilns in the Buttermarket and Sankey Street, and retails hops, malt and ale to numerous customers. Nevertheless the file business still occupies the greater share of his attention. Assisted by three or four workmen, he continues to produce files at his inn, and in addition he finds employment for out-workers in other towns. By 1791 he is well established as a master-manufacturer, and in the following year he consults with other filemakers, like Green of Liverpool, with a view to regulating the prices of Lancashire files. His own have won such a reputation that unscrupulous filesmiths in Sheffield have begun to stamp *PS* on their files. And though he still disposes of the bulk of his wares through wholesale ironmongers like William Harris, Chorley and Peet, Clowes and Whitley, and Clough and McGuffog—all of Ashton—he is travelling the country and has connections in all large centres of population.

The story of the expansion of his market is not without interest: deliberately he spreads his orders for cast steel among a number of Sheffield converters and refiners; and, as most of these are also factors or merchants, there is an understanding that each shall buy files of him in return. Later he has similar relations with Walker and Booth of Rotherham, Isaac Cookson of Newcastle, and—through David Mushet—with the Calder Iron Company. William Chamberlain, wholesale ironmonger of Skipton, purchases large quantities which he supplies to retailers in the northern counties; but there is a persistent tendency for the manufacturer to get into personal touch with shopkeepers and large consumers. Among the great industrialists to whom his files were sold direct were the Duke of Bridgewater, the first Sir Robert Peel, Samuel Greg of Styal, the Darbys of Coalbrookdale, Matthew Boulton of Soho, and the Carron Partners. As time went on Stubs supplied awls, pliers, compasses and other Lancashire tools; but, throughout, his own small high-grade files remained the staple product.

In the days before the introduction of the emery-wheel and modern methods of moulding the file occupied a far more important place in industrial processes than now. Files were used not only by sawyers, clockmakers, cutlers and other long-established craftsmen, but also by cotton-spinners, millwrights, engineers, and, in fact, by all who made or used machinery. Stubs was fortunate in setting up in the trade at a time when the textile and iron industries were entering upon their lusty youth; and this, no less than the quality of his product, accounts for the steady growth of the undertaking. A Workmen's Book indicates that in 1805—the year before his death—between £75 and £100 a week was paid in wages at Warrington, and between £30 and £40 at Farnworth, a convenient centre for the out-workers in the villages between St. Helens and Widnes. It is not possible to make any estimate of profits, but some indication of turnover is afforded by Stubs' dealings with his bankers, Messrs. Parr, Lyon & Co.,¹ though many cash payments would not go through the bank account. In 1805 the Pass Book shows that bills aggregating £6,883 5s. 10d. were paid in, and in the boom year of 1815 the firm, under Stubs' sons, received from customers remittances amounting to £17,493 11s. 1d.

It is, however, as regards industrial organisation that these records are most illuminative. Filemaking consisted then, as now, of several distinct processes. Rods of steel were first forged into file blanks; these were then annealed and smoothed with a large file to remove irregularities and any scale left upon them from the forging process. Next the file was cut: the blank was placed on a block of pewter—obtained by melting down measures and tankards which were no longer of service to the "White Bear"—and the indentations were made by hammer and chisel. Hardening was effected by dipping the file in malt dust, or in "barm bottoms" from beer barrels, heating in a small furnace, and, when white-hot, plunging it into a solution of salt and water. With all deference to metallurgical opinion, it is suggested that carbon from the malt dust or barrel dregs entered the teeth of the file and that something like what is now known as case-hardening resulted. This, at least, is the traditional explanation of the early superiority of the *PS* file. After hardening, the files were cleaned, tested, oiled and packed in stout paper.

A Workmen's Book beginning in 1788 shows that Stubs was already providing employment for two out-workers, and within

¹ Messrs. Parrs—now merged in the Westminster Bank—originated in Warrington in 1788.

a few years for a numerous body. Most of these were in the same economic position as their employer ten years earlier: each had his own shop and was assisted by one or two apprentices: each was debited with the value of the steel and with that of any tools and material supplied—large Sheffield files for smoothing, anvils, pewter, malt dust, oilstones and so on. And each was credited with the value of the finished work—reckoned from established price lists—less the customary 25 per cent. discount. Every week, or fortnight, a cash payment was made, determined apparently by the need of the worker rather than by the work performed during the period; and every two or three months the account was balanced. The workman was paid any surplus due to him, or, if there were a debit balance, it was carried to the next account. Since weekly payments varied considerably it is necessary to consider earnings over a fairly long period. During fourteen months following January 20, 1788, Thomas and William Appleton of Huyton were credited with files valued, after discount had been deducted, at £166 5s. 6d.; they had received in materials £49 8s. 1½d., and their joint net earnings were, therefore, £116 17s. 4½d. Similarly during a period of sixteen months beginning April 3, 1788, William Turner's net earnings were £33 11s. 7d.

The occasional letters of the less illiterate of these workers give a vivid picture of domestic industry at this period. In October 1791 Carolus Charles of Aughton, a domestic filemaker assisted by his sons, wished to sever his connection with Green of Liverpool and to move to Warrington. Since March 1789 he had occasionally made files for Stubs, and, as a means of obtaining more regular employment, Charles undertook to supply fourteen files to the dozen if "soft," or thirteen if hardened. The question of the number of units in a dozen had frequently given rise to acute disputes in the Sheffield file and cutlery trades, and in 1787 one of these had drawn from Joseph Mather, the file-cutter versifier, his (locally) famous tirade against Master-Cutler Watkinson: ¹

"May those be transported or sent for marines
That works for big Watkinson at his thirteens."

Little wonder then that Carolus Charles asked that the arrangement might be kept "a profound secret," and that, when a rumour of it spread among the file-workers of Liverpool, Charles was

¹ See G. I. H. Lloyd, *The Cutlery Trades*, p. 241, and *The Songs of Joseph Mather* (ed. Wilson), p. 63.

held up to derision. But even this was preferable to the situation he found himself in with Green :

"Yesterday week " (he wrote, January 1, 1792), "I had not my due by near half, yesterday the same, he will pay only 10s. pound of the Clear neat Cash when all is deducted, and I can't take truck for the remainder at his price."

But release was difficult, and on July 31 Charles was still tied :

"Have had another summons from Mr. Green. I believe he is very ill at want for files and wonders I neglected him so long. If he searches his breast he may soon know . . . he is for bringing an Exorbitant bill against me. His way of tradeing has been very intricate. When any cash of any acct. was to be paid he neither cou'd nor wou'd he said pay it Stormingly saying I pay you more money than any one, then paying what he thought proper . . . and if importuned for a bill fly in a passion and tell you he had more plague with you than any body else, after you had travel'd ten or 12 Miles in the night and not a dry thread on you and set in his warehouse for 6 or 7 hours without being ask'd what you want. I wish I was well out of his clutches. . . ."

The difficulty was that Carolus Charles, like most of his fellow filesmiths, was chronically in debt to his employer. Week by week he had received round sums in money and goods against which the files had been set in part payment. He offered to pay off his debit balance at three guineas a month, but Green demanded immediate payment, or alternatively that Charles should continue to work for him until the full debt should be paid in files. Peter Stubs, apparently, came to the rescue. Thereafter bundles of steel were sent from Warrington fortnightly to the "Horse and Rainbow," Liverpool, where Carolus Charles, his wife, or one of his lads called for it; and every fortnight fifty or sixty dozen files were sent to Stubs, who remitted four or five guineas by the carrier, stopping a guinea each time towards meeting the debt he had taken over from Green.

One of the sons of Carolus Charles was violently disposed : he assaulted first his brother, then his landlord, and finally he was lodged in Chester Gaol, charged with an offence against a woman in Liverpool for which he was subsequently hanged. The expense which his father was put to in supplementing the prison diet of bread and water, and of attending the Assizes, necessitated

further borrowing, and it is easy to see how such a series of misfortunes might tie a man permanently to his employer.

Not only such shattering events but minor domestic disturbances might be the occasion of indebtedness: "Sir, this is to inform you that my wife is deliver'd of a Child and I shall be glad if you will assist me at this time," wrote William Lancelot of Liverpool, March 16, 1795. The solatium requested was the now well-established thirty shillings. Again, it is not difficult to imagine how an innkeeper like Stubs might soon find himself a creditor to his workers: although there is no evidence of a real truck system in his enterprise, workmen were frequently debited with beer and rum.¹

Moreover, fluctuation of employment was very marked during the French wars. For some time James Lyon, awlmaker of Stockport, had worked exclusively for Stubs—unlike most other out-workers he had borrowed instead of buying his tools—but in the late months of 1795 there had been little for him to do.

Stockport,

December 17, 1795.

"SIR,

I rec'd your letter yesterday. I am in good Health but have been mutch uneasey at your silence so long. I thought I had offended that you wou'd not imploy mee any longer. I have tould Mr. Ouldknow and hee will give mee work after Christmas. So I intended to a maid you sum work in the Holodays for what I owe you and to a return'd your Tools. But I will never leave you while you will Imploy mee. I will never Bastard my Promes to you. Your abstance has been no profit to mee though I have sould sum and I have a Quantaty under hand of most usefull sorts and will bring you all I can next week's end. I must beg you will send mee letter to receive 3 Guineas for its a long time since I rec'd mutch. If you will grant my Desire I will bee under a heavy stopidge that shall suffice you. I will not send any more by any Body for I will bring them every other Saterday if God Permit.

"I remain your Hble Srvt. JAS. LYON."

The domestic workers were clearly of different types, varying from the individual working in his own home to the master of a

¹ A "Statement of the Workmen's Account" made December 31, 1810, shows that of 77 employees, 61 were indebted to the firm for an aggregate sum of £256 0s. 6½d., one owing no less than £28 15s. 10½d.: the remaining 16 workers were in credit to a total of £20 2s. 3d.

moderate-sized workshop giving employment to several apprentices and journeymen. It is only by a tedious process that one can ascertain the annual net receipts of any out-worker; figures have already been given for two in 1788, and others have been taken out for a few of those employed in 1813. During the twelve months Peter Whitfield, filesmith of Ditton, for example, earned £58 2s. 7d.; his son, Peter Whitfield, Junior, £23 15s. 3d.; and William Dennett £40 0s. 5d. Others, making Lancashire tools, who would have to pay wages out of their receipts, received rather more. James Geakes, a maker of compasses and dividers, was paid £83 7s. 2½d., less approximately £5 for materials; and William Hornby, manufacturer of clock-makers' tools of Prescott, £310 12s. 8d., less about £15 for iron, steel and files supplied by Stubs. At first sight one is tempted to regard men like Hornby as something more than out-workers. Yet, though they received substantial remuneration and employed others, they had little in common with the capitalist-entrepreneur. Their raw material was purchased of Stubs in small quantities, usually to satisfy the requirements of a particular order; they bore none of the risks of the market; they supplied no credit, but were paid on delivery of the finished goods; and they sometimes gave an undertaking that they would serve no other firm. In all these respects they were typical domestic out-workers.

Side by side with the system hitherto described it is possible to trace the growth of another with slightly different features. In 1802 Stubs decided to concentrate some of his labour, and accordingly built the premises still occupied by the firm in what is now Scotland Road. Buildings were erected round three sides of a cobbled yard. On one side the ground floor consisted of three forging shops, above which were cutting-rooms; another side was occupied by the hardening and finishing shop; and the third was the warehouse. Real, if small, benefits must have been obtained from drawing scattered workers together into a single workplace. Supervision was now possible and division of labour was facilitated. Here and there, it is true, domestic workers had confined themselves to a single process: in 1791, for example, James Molyneux of Prescott, and in 1801 John Heyes of St. Helens, were given blanks to file and cut; and in 1804 D. Edleston of Liverpool confined himself to forging blanks. But such specialisation was unusual, for quality might suffer if cut files were moved about the countryside before being hardened. Once a manufactory had been set up there was no difficulty. On January 5, 1803, eight specialised file-cutters and one forger agreed

to serve Stubs, on specified terms, for two years, "or till such times as we Respectively or Individually pay what we now owe or may owe"; and a month later a similar engagement was made with ten other file-cutters. At the same time eleven apprentices were taken for seven years: payments rising from 2s. a week in the first year to 7s. 6d. in the seventh were promised, but food, clothing, lodging and medical attention had to be provided by the parents. Benjamin Jolley, who had served Peter Stubs from the first days, was still working as a hardener and finisher, and perhaps now assumed the additional task of supervising the apprentices.

The interest of the new organisation is that it illustrates a definite step in the evolution of a wage-earning class. The worker now receives a money wage instead of being paid a price for his product. Furthermore, there is an understanding that the employer will provide regular work, and this is made explicit in the agreement of February 1803.

It would be wrong, however, to suggest that this year marked the transition of the firm from a domestic to a factory organisation. The bulk of the files and tools were still made by out-workers, and hence the statement of William Stubs to Nasmyth was substantially, if not literally, true. And even the Warrington workplace did not constitute a factory in the modern sense, for no power was installed: it was an example of that intermediate stage termed—not very happily—the manufacturing system, as distinct from the domestic system on the one hand and the factory system on the other. Such manufactories were by no means new in the metal trades, for as early as 1690 Ambrose Crowley had established a much larger concern with a similar organisation at Winlaton, near Newcastle-on-Tyne. Since 1803 the firm of Peter Stubs has continued to employ workers under both systems, though the introduction of file-cutting machinery in the late nineteenth century has caused a steady decrease in the number of out-workers.

In some branches of industry the possibility of harnessing water or steam led to an early adoption of factory methods; in such cases the transition held spectacular features which have rightly arrested the attention of the historian. But where, as in filemaking, there were technical difficulties in the way of machine methods—and where, after these had been overcome, the hand-made product was still considered superior—less was to be gained by concentrating workpeople in a single set of buildings. In these industries only very slowly has an employing class relieved the worker of the obligation of providing tools and

workshop—very slowly has an independent, weekly wage-earning class come into being. Or, for those who prefer it so, only very slowly has labour been divorced from capital and deprived of a share in the control of industry—only slowly has a proletariat evolved.¹

T. S. ASHTON

¹ For a fuller discussion of the reason for the survival of small business units see G. I. H. Lloyd, *The Cutlery Trades*, to which volume this article may perhaps serve as a footnote. By the kindness of J. Aylmer Frost, Esq., the Stubs records are now housed in the Lewis Library of the Faculty of Commerce in the University of Manchester.

THE COTTON MARKET IN 1799

THERE is little justification for attempting to catch a glimpse of the organisation of a market at a particular point in its history unless, like the cross-section of the botanist, the specimen presented manifests a departure from the normal, or marks the initiation of a new stage of development, or shows obedience to natural laws of growth so that it records within itself something of its history. Two of these features of justification may fairly be claimed for an examination of conditions in the cotton market at the close of the eighteenth century. An interesting stage of development had been reached when the Liverpool market became dominant over its rivals, and when, in the direct distribution of cotton to spinners, it entered into partial competition with the secondary market at Manchester. Again, a new phase was about to be entered upon as the supplies of the saw-ginned American cotton became the chief subject of dealings on the market. And, in the meantime, it is possible to trace the lines of growth along which, although in primitive and uneven fashion, the mechanism of the market evolved.

By 1799 Liverpool had already established itself as the premier market for cotton. It is true that London was not far behind, and Glasgow and Bristol were still important, but each new development tended to emphasise Liverpool's advantages and to confirm its position. Manchester was the great distributing centre, maintaining a large number of cotton merchants and dealers who were jointly concerned, for it is not easy to lay down precise lines of demarcation of the two groups, in the retailing of cotton to the spinners. The smaller spinners were bound to the Manchester middlemen because of the credit given by them; if there was to be direct dealing with Liverpool it could only be on the part of the bigger firms whose larger capital gave them independence. At Liverpool cotton was sold directly by importers and by dealers, as well as through general brokers and cotton brokers. But the direct sale by importers was fast disappearing as the dimensions of the trade grew; the general brokers hung only upon the margin of the trade; and the dealers, who seem to

have retailed cotton to those mills which were within a short radius of the port, were of negligible account. There were at least six specialist cotton brokers, and through them the bulk of the business was transacted. In turn, the lion's share fell to one Nicholas Waterhouse,¹ who acted both as selling and as buying broker and who had already been in business for seventeen years.

The clientèle of Nicholas Waterhouse was a remarkable one. It included many names which are now celebrated, the record of which serves not only as an indication of the position he occupied in the Lancashire trade, but also as a reminder of the growing national importance of the trade. Of the cotton importers who sold through him there were the houses of Rathbone, Hughes & Duncan; Ewart & Rutson, the founder of which firm was godfather to William Ewart Gladstone; and Cropper & Benson, the famous Quaker firm, whose senior partner was later a *bête noire* to Cobbett—the same “canting Jemmy” who was derided by Cobbett because he sought to make “Ireland as happy as England . . . simply by introducing cotton factories, steam-engines, and power looms!”² Among the Manchester dealers occurs the name of Robert Spear; and, of manufacturers, there were Richard Arkwright, W. G. and J. Strutt, John and Samuel Horrocks, Robert Peel & Co., and Peel, Yates & Co., though only the first two of these were regular customers. There is even a transaction on behalf of the Chorlton Cotton Twist Co., with which Robert Owen was still associated; and Birley & Hornby of Blackburn, who bought yarn from Robert Owen, bought cotton from Nicholas Waterhouse. The latter employed as his local bankers Messrs. William Clarke & Sons, but the firm became Clarkes & Roscoe at the end of 1799, for the celebrated historian of the Medici emerged from his retirement in the hope of pulling his friend's firm out of danger.

The total import of cotton into Liverpool in 1799 was 86,784 bags, and in that year Mr. Waterhouse handled a business of approximately 25,000 bags. His Profit and Loss account records the number of bags bought or sold on each commission, so that the figures can be stated without doubt. The proportion was extremely handsome, and it was largely due to the fact that he had

¹ Much of the information relating to Nicholas Waterhouse's business has been collected from one of his ledgers, elaborately entered and carefully preserved, covering the years 1799 and 1800. For permission to make use of this interesting source of material, the writer is indebted to Mr. A. Bryce Muir, President of the Liverpool Cotton Association, 1923–24, whose firm is in the direct line of descent from the original firm of Nicholas Waterhouse & Sons.

² *Rural Rides*, September 3, 1826.

the patronage, on both sides, of the chief men in the trade. It must be admitted that in half a dozen transactions, for reasons which do not appear, double brokerage was charged; and that sometimes spinners and dealers resold a parcel of cotton. These do not affect, however, the significance of the figures, for an allowance of 500 bags is ample to offset such overlapping operations. Two-thirds of the business was transacted on behalf of importers, on selling commissions; one-third on buying commissions for spinners and Manchester merchants. Not only were spinners such as Arkwright and the Strutts independent of the local dealers, but the maintenance of the quality of their yarn would require that their choice of cotton should be made where there was the largest selection available, and it is easy to see that in their case it would be profitable to employ the specialist buyer. It is possible to support this thesis by reference to the extent of their dealings with the broker. During the year, Arkwright paid brokerage on 1,300 bags valued at £36,000; the Strutts took 1,500 bags costing in all £28,000, and the connection with the two spinners brought more than £300 in commissions to their fortunate agent.

The cotton was received at Liverpool through two main channels—by direct importation on the part of ship-owning merchants, and by consignment to commission merchants and brokers. Importation was the more common at this time,¹ and the four chief selling clients of Nicholas Waterhouse were importers; one of them, the firm of Rathbone, Hughes & Duncan, was engaged in the North American trade, while the other three, the houses of Bolton, Earles, and Kenyon, were in the West Indian trade. Each of these sold through their broker about 2,000 bags in the course of the year, thus between them making up just one-half of this side of his business. The custom of the four represented a turnover of £230,000, and a total amount in brokerages of nearly £1,200.

It would appear, from a curious fragment of evidence,² that

¹ London was the chief centre of the consignment business. In the other ports the majority of the merchants continued to import on their own account. Cf. Westerfield, *Middlemen in English Business*, p. 360. *Liverpool General Advertiser*, October 3, 1799.

² "A most respectable gentleman now residing in Devonshire, who has a considerable landed property there, and has also the largest possessions of any in the colony of Demerara, has for these twenty years been intimate with you, and consigned to you the crops of his extensive cotton estates, by which I am well assured you made an annual commission of upwards of £1,000 besides the advantages of freight for your own vessels, etc. This gentleman has now a large family, and as you had made your fortune, and were about to retire from

at first the brokers were prepared to undertake the responsibilities of consignment business without any addition to the normal selling commission. At first sight this seems explanatory of the rapid way in which, over the next twenty years, connections were made by brokers for the assumption of consignment business. It is, however, inconsistent with the persistence of the commission merchant and with the fact that during the same period the responsibility attaching to the receipt of goods on consignment became more onerous. In particular, in the case of cotton, the financing function was assumed, immediate advances being made to American planters against their consignments; indeed without this aid it seems likely that the expanding cultivation of American cotton would have been very much retarded. In turn, the business became limited to those who could employ a relatively large capital. It is improbable that the brokers who undertook additional service and risk would continue to do so for the same remuneration which their weaker competitors could obtain for expert selling alone, and the course of events rendered the separation of functions inevitable. It is interesting to review the probable stages of differentiation. The eighteenth-century commission merchant carried on a more or less miscellaneous trade on behalf of scattered correspondents; under the changing conditions it became possible for the newer functionary to carry on the same duties in a limited field at a much cheaper rate; but the increasing volume of trade enforced specialisation, the distinction of function being recognised in the separation of rewards, although not made absolute by the separation of the agencies concerned.

Historians of the cotton market have paid only cursory attention to the late eighteenth century; the invention of the saw-gin has been regarded as the outstanding landmark; and the formal organisation of the market has been held to date from the early part of the nineteenth century, when the swollen imports of the standardised American cotton began to dominate it. In

business, he thought he might as well save a few hundreds a year as not by putting his cotton into the hands of the very broker who did your business at Liverpool, and who charged him one-half per cent. only, while your charge was two and a half per cent.

"This gave you great offence; you at once forgot all former favours, and gave orders to the captains of your ships at Demerara to take in on no account a single bale of his cotton, unless consigned to your address; he was therefore totally unprepared with freight vessels, and was very much disappointed and hurt at your unexpected conduct."—*Interesting Letters addressed to John Bolton, Esq., of Liverpool, Merchant, by George Baillie, Esq.* (London, 1809), pp. 36-7.

1799 the West Indies were still the chief source of supply, furnishing in that year one-third of the cotton imports into Liverpool; from the United States came not more than one-fourth, while three years previously American cotton had made only one-sixth of the total. It is not likely, therefore, that up to 1799 the new supplies had exercised any separate influence upon the customs of the market. Under these circumstances there is special point in inquiring further into those customs, thus raising what might otherwise be regarded as inconsequential detail into evidence of rational growth.

Ellison states the various ways in which cotton was sold during the eighteenth century, but he dismisses them as if they were all co-existent, and as if chance alone determined the method of sale.¹ In the first part of the century it appears to have been customary for importers to sell direct to fustian manufacturers. Later, the bulk was sold through general brokers, by auction if the holder wished to realise quickly, otherwise by private sale. At the close of the century the bulk of the import was passing through the hands of the cotton brokers. Both auction and private sale were resorted to, but not in formless or haphazard fashion. The choice lay with the importer, but it is suggested by contemporary newspaper advertisements and by Mr. Waterhouse's ledger, and confirmed later by brokers' circulars, that Friday was the recognised day for holding the "public sales." Earlier in the week came the spinners and the more responsible dealers who had a definite demand to satisfy, while the auction sale attracted a large attendance of dealers, anxious to replenish their stocks by acquiring any lot that offered at an advantageous price.

Again, it can only be inferred from Ellison's account that the reduction in the brokers' commission to one-half per cent. took place about 1810, and the fall is attributed by him to the innovation of "selling on a counter," which was made possible by the extended cultivation and the accompanying care and selection in packing. Previously "the remuneration paid by the importers to the brokers was generally 1 per cent. on the value of the cotton sold, and the dealers and spinners frequently paid $\frac{1}{2}d.$ to $1d.$

¹ "In the infancy of the trade . . . the cotton imported was for the most part sold to dealers. . . . Sometimes it was sold direct to the dealers by private treaty; at other times by auction, either by the importers themselves or by brokers in their employ. Sometimes the dealers themselves attended the auctions, and purchased direct; at other times they commissioned brokers to attend and buy on their account. Occasionally the importers sold direct to spinners. . . . Occasionally, too, spinners purchased through brokers."—*The Cotton Trade of Great Britain*, pp. 165–6.

per lb.”¹ Against that view it can simply be said that Nicholas Waterhouse’s brokerage was one-half per cent. in every case, whether for buying or selling, and such consistency argues that this had been for some time a recognised charge.

While later developments in the cotton market were certainly due to the attainment of regularity in the cotton offered for sale, the early establishment of the market owed something to the absence of uniformity. When cleanliness and regularity of standard could be taken for granted, emphasis could be laid almost exclusively upon fineness and length of staple; but the conditions under which the first brokers worked required individual and exacting attention in the choice of cotton. Allowances in full were made by importers for cotton returned as being damaged, “seedy,” or false-packed.² In this there would be a plain convenience to those buying firms who customarily employed a broker. Though the dealer or the spinner might get direct satisfaction from the importer, it would be a tardy business, the more so since claims were commonly made five or six months after delivery of the cotton. The prolonged haggling with a distant importer was avoided when the amount of an admitted claim could be at once credited to the buyer and debited against the seller in the broker’s books. Waterhouse’s accounts show that it was part of the normal routine to deal with such claims. Allowances for damaged cotton, for “seeds” or “seedy cotton” or “unginned cotton” are to be expected and are the subject of the most frequent entries of this nature. There are, however, more surprising entries—made with due gravity and with meticulous attention to weight, mark, and date of purchase of the original parcel—which reveal considerable fraud in the packing of cotton. Such are those for claims against “stones” ranging from a trivial item of $3\frac{1}{2}$ lb. up to $51\frac{1}{2}$ lb., including in one case “a stone” of $26\frac{1}{2}$ lb. which caused a loss to the importer of £2 16s. 10d. All the usual devices were resorted to. “Stones and sand” represented a loss of £1 1s. 2d. on one bag. On one occasion there was 69 lb. of clay; on another the same weight of wood. Elsewhere it was a “lead weight” of 7 lb.; or $17\frac{1}{2}$ lb. of iron allowed for at half a crown a pound; in a worse case it was 106 lb. of what was frankly designated “rubbish.” So far as the

¹ *Op. cit.*, p. 166.

² The false-packing of cotton was an evil of long standing. An early example is quoted by Weeden, *Economic and Social History of New England*, i. p. 242. “In 1672 John Hull gets two bags of ‘vine cotton woole’ from the West Indies. He trades them into the country for provisions. The customer finds ‘much fowle cotton’ in the middle of one bag, and Hull is obliged to make reclamation of his correspondent.”

evidence of the ledger goes, it would appear that false-packing was at this time comparatively rare in the consignments from North America. It may be that some significance attaches to this virtue in providing an additional explanation of the partiality displayed for American cotton in spite of the occasional mutilation of the fibre by the saw-gin. But the basis is too slight for the establishment of formal conclusions, and, in any case, the next generation heard bitter and recurring complaint of the false-packing of American cotton.

As yet there was no attempt at the grading of cotton. While this may seem remarkable, since the regular employment of brokers presupposes the adoption of some technical descriptive terms which convey quickly the requirements of the buyer, the reason is not far to seek. Grading was already in use for other West Indian produce: a contemporary *Prices Current*¹ quotes for "Dabs," "Brown," "Middling," "Good," "Fine," and "Very Fine" in the case of sugar, and for "Ordinary," "Middling," "Good," and "Fine" in that of coffee. Later the same system was modified and adapted to cotton. In the meantime, however, such were the differences between the qualities produced in different areas that it was sufficient to quote cotton according to its place of origin, and the same circular names seventeen such varieties.² A grading system proper would be necessitated as a uniform type of cotton was introduced and as one or more areas became of paramount importance. Furthermore, the system would be likely to extend, other things being equal, to the type which was most valuable and in which, therefore, differences in quality would be reflected in a wide divergence of price. By 1805, again on the evidence of a broker's circular,³ Sea Island cotton was graded into "Prime," "Good," "Fair," "Middling," and "Inferior"; this was a time when the lowest price of "Inferior" was 1s. 7d. and the top price of "Prime" 3s. 2d. Although the usual terms were employed in the description of particular lots, other types were still denoted in the main by place of origin, and in no case among these was the margin of quotation more than 2d. per lb.

As for the financial arrangements between the broker and his buying clients, there is again anticipation of what was to become the prevailing custom. Short credits only were allowed, the majority of payments being made in three-months bills,

¹ Messrs. Ewart & Rutson's Circular, December 4, 1797.

² Berbice, Surinam, Cayenne, Porto Rico, Demerara, St. Domingo, Jackmell, Tobago, Barbadoes, Bahamas, Grenada, Guadaloupe, Trinidad, Common West India, Cartagena, Carracca, Guiana.

³ Mr. Samuel Hope's Circular, September 28, 1805.

though sometimes two-months and, on rare occasions, four-months bills were presented; and the settlement was effected within periods ranging from two to fourteen days. Ten years later, in a ledger of 1809, the record of every transaction is marked, "Payment in 10 days per three-months bill," and this was authoritatively stated to be the rule of the trade by Smithers¹ in 1825, and by Baines in 1835.²

The year 1799 saw the highest cotton prices of the decade; average prices of West Indian cotton were 33*d.* per lb. in 1798, 37*d.* in 1799, and 29*d.* in 1800. High prices swelled the income in brokerages of Nicholas Waterhouse, and his profit and loss account shows total receipts of £3683 10*s.* Yet price fluctuations in all probability gave him little concern, for new business was steadily coming in. In spite of the fall in prices in 1800 his receipts had mounted to £7781 14*s.* 5*d.*

It was to be expected, however, that the remunerative nature of cotton broking would bring an influx of competitors. Mr. Waterhouse had the special advantage of transacting both buying and selling business; the separation of the two branches, in any case an inevitable development, was hastened by the fact that the new-comers rarely entered without some guarantee of patronage, either from importers or else from spinners. Thus both William Rathbone and John Bolton, who among the importers had been Waterhouse's chief clients, ultimately gave their custom elsewhere because of the closer ties which they had with younger firms. On the other hand, spinners in various localities gave their trade to former spinners or dealers who had foreseen the vigorous development of the port market and had set up in Liverpool as brokers. So William Heaton, a cotton spinner of Blackburn, established himself in Liverpool in 1808; before him had come William Peers, a Stockport spinner whose mill had been burned down; and John Wrigley, unsuccessful as a spinner at Ashton-under-Lyne, began to buy cotton on behalf of neighbouring spinners in 1799, and finally settled in Liverpool.³ There was yet another channel by which the numbers of the brokers were augmented: the apprentice had a reasonable expectation of becoming himself a principal when his term was completed, and of the apprentices who were trained under Nicholas Waterhouse at least four became eminent figures in the market.⁴

STANLEY DUMBELL

¹ *Liverpool, Its Commerce, Statistics, and Institutions*, p. 140.

² *History of the Cotton Manufacture*, p. 319.

³ *Ellison, op. cit.*, pp. 208, 236, 257.

⁴ *Ibid.*, pp. 199-206.

PRICE CONTROL AND THE CORN AVERAGES UNDER THE CORN LAWS

AFTER the late war proposals were entertained for the bonus-
ing of British wheat growers. The proposals involved a reference
to individual or regional costs of production, as well as a measure
of control over the scale of wages and the standard of farming.
After 1815 arable farming was in the same difficulties as it was
after 1920. In 1815, however, there was no machinery for
arriving at farm costs, and the trend of economic thought was
opposed to interference with wages and farming methods. Relief
was sought by a rigid policy of fiscal protection. It depended
for its operation on reference to the current price of wheat on
the home market; and broke down administratively on the lag
between policy and prices and the inducement offered to specu-
lators to defeat the policy by manipulation of prices.

After 1800 the setting of the Assize of Bread gradually fell
into disuse, but the official prices of corn were still needed for
the delicate task of regulating the bounties and duties established
by the Corn Laws. Hence in each Corn Law there was a section
relating to the returns of prices from the different markets and
the determination of the averages on the basis of these. The
returns were made by agents of the Government, called Inspectors
of Corn, to the Receiver of Corn Returns at headquarters; and
we find that, as one Corn Law follows another, the paragraphs
relating to their functions increase in bulk with the efforts to
secure accuracy and prevent fraud. Up to 1820 the Inspectors
outside London were underpaid, receiving only 5s. for each
return, but with the appointment of William Jacob to the
Comptrollership of Corn Returns in 1822, a post which he held
for twenty years, many defects of administration were removed.

By the Act of 1791 (31 Geo. III, c. 30), which continued the
trend of previous regulations, the returns were taken from those
parts of England more immediately accessible to the sea, denomi-
nated the Twelve Maritime Districts. These districts were
independent of each other, the foreign trade in corn being

governed in each by its own district price, so that the ports might be open in one district and closed in another. Scotland also was divided into four districts; the foreign corn trade of each being governed in the like manner. The inconveniences of provincialism were most clearly exposed in the years immediately following 1770, when England was now an exporting, now an importing country. It used to happen that bounties were given on corn leaving for a foreign country from one district at the very time that foreign corn was being imported into a neighbouring district at the low duty rate. Therefore, in the next general Corn Law (44 Geo. III, c. 109, 1804) a change was made. It was decided to regulate the entire foreign corn trade of England by one internal price, and the aggregate average price of the twelve maritime districts was taken as the basic or regulating price; it was also enacted in the Corn Law of 1804 that the entire trade of Scotland should be governed by the aggregate average of the four Scotch districts.

But the change did not suit Scotland. For when the price of wheat rose sharply in 1805, the rise was not duly reflected in the returns from the remote districts. The general average worked out at 62s. 11d., leaving foreign wheat still liable to a prohibitively high duty at a time when wheat stood at 80s. in the markets of Glasgow, Paisley and Greenock. Although the manufacturing population was now within sight of famine, it was nevertheless impossible to relieve them by duty-free imports from America. Petitions poured into Parliament. It was prayed that Scotland should come under the English averages, which were always higher, and the prayer was granted (1805). The adoption of a single average for Great Britain removed the last obstacle to the freedom of internal trade. The regulation permitting grain to pass at all times without hindrance from one part of the country to another gave to the inhabitants of the less productive countries a more regular and plentiful supply. It also assisted the producer, assuring, for example, a constant market to the growers of Norfolk barley: which they had not possessed hitherto. As matters had stood in 1804, "the (*sc.* Scottish) ports might be shut against the importation of grain from England by the returns made during the first plentiful year that might occur."¹

Up to 1806 Ireland was accounted a foreign country in relation to its trade in corn with Great Britain. After 1806,

¹ Committee H. of C., appointed to consider the petitions relating to the Corn Law of 1804 (1805, III.). Evidence of Wm. Macdonald, M.P., p. 15.

when the trade in corn between the two countries was made entirely free, the foreign trade of Ireland was regulated by the English averages. Thus Great Britain and Ireland, which had been a United Kingdom since 1800, arrived at a single ruling price. Henceforth the English averages were the sole object of attention; and on the appearance of agricultural distress in 1820 a Committee¹ sat to inquire into their operation. The general average, they reported, was ascertained thus: "The total quantity of corn sold in each town is cast up, and the total of money for which the same was sold; and then dividing the money by the quarters, the result gives the average price of that town; these average prices of each town being thus found are added together, and being again divided by the number of towns give the average of such district; and the averages of the districts thus found are added together, and being divided by 12, give the aggregate average of the whole twelve districts; and the combined aggregate average price of the six weeks preceding the 15th May, August, November and February determines the opening and shutting of these ports at those periods respectively."² But to regulate the course of trade for a whole three months by averages taken from the six weeks preceding the beginning of the period was found to be inadequate for the purpose of the inelastic Corn Law passed in 1815, 55 Geo. 3, c. 26 (free entry to foreign wheat at prices below 80s. a quarter, absolute prohibition at prices at or above 80s.). A provision was therefore inserted in this law to the effect that "if after the opening of the ports to the importation of foreign corn, etc., the price of any such corn, etc. should in the first six weeks following such opening fall below the prices at which foreign corn is allowed to be imported, the ports shall be shut against the importation of that sort of foreign corn, from any place from the Eyder [Denmark] to the Bidassoa [on the Franco-Spanish boundary]—[i.e. from the Near European ports]—for the last six weeks of that quarter, or until a new average shall be made up and published."³

The Committee of 1820 found serious defects both in the making of the returns and the calculation of the averages. As the law compelled returns from factors only, these were only

¹ Committee H. of C. on Petitions complaining of agricultural distress, "who were instructed . . . to confine their inquiries to the mode of ascertaining, returning and calculating the average prices of corn, etc." (1820, II.). Report issued July 1820.

² Report, p. 8.

³ Report of 1820, p. 5. This provision was in actual operation between September 1818 and November 1818.

complete in London, where most of the corn was sold on commission, but in the provinces, where it was usual for the growers and importers to sell direct to millers and merchants, the bulk of the sales did not enter into the returns. In Liverpool, especially, the returns were ludicrously inadequate. It was the practice for buyers of corn resident in Manchester, Warrington and other considerable towns to make their purchases in Liverpool, but because they did not live there they were not asked for any returns. Furthermore, Liverpool and district consumed a great deal of Irish corn, which, not being British, was not returnable. The corn, though good of its kind, was inferior to English; and therefore the Liverpool average represented the average not of what was bought and consumed there, but of a high-priced fraction of English-grown corn. In other towns there was just sheer neglect. "It often occurs, particularly in Manchester, Macclesfield and Stockport, that returns are made to the Receiver of 'None Sold.'" In Bristol, "although there are about forty factors and dealers in corn, yet not more than six or seven . . . ever make any returns."¹ Now, if there had been no inducement to falsify the returns it is possible that these random samples would have deviated but little from the true average. But there were such inducements. "Millers and bakers, when concerned in making the return, may have an interest in making the price (particularly in towns where an Assize of Bread is set) appear high. Merchants and factors of foreign corn may have the same inducement to open the ports and warehouses. Farmers have a pride in the quality of their growth of corn as proved by the sale, and often give large measure, or make up deficiency of weight by additional quantity."² A notorious case of manipulation was quoted from Liverpool. On a recent occasion returns had been made to the following effect:—"2,300 qrs. of British wheat at 50s. per qr.", while the true average of the market had been from 68s. to 70s. "The parties by whom these returns were made were understood to be considerable holders of British corn, and were induced to resort to this mode of reducing the general averages to promote the purposes of their speculations and to render more improbable the ports being opened for the importation of foreign grain."³ Inasmuch as each maritime district, like each State in the American Senate, counted equally, regardless of its numerical importance, in the determination of the general average, mani-

¹ Report, p. 6.² Report, p. 6.³ Committee of 1820. Evidence of John Gladstone, Esq., p. 54.

pulation was most likely to be tried in the sparsest districts; and accordingly the Committee, while urging an all-round increase of vigilance, proposed to remedy this particular defect by lumping together the returns from all the towns, some 150 in all. They hoped for safety in numbers! The Act of 1 & 2 Geo IV, c. 87 (1821), gave effect to this. The total of the prices of each sort of corn, divided by the total of the quantities of each sort, gave the average which was to be published in the *London Gazette*, and which was to "regulate the importation of foreign corn, meal and flour for consumption, and the taking the same out of warehouse for the purpose of being so consumed, until new average prices shall, under 55 Geo. III, or this Act, be made up and notified to the officers of customs."

On the occasion of a temporary Act (7 and 8 Geo. IV, c. 57), passed in July 1827 to permit the entering of warehoused corn for home consumption at certain duties, a further improvement was made (7 and 8 Geo. IV, c. 58). It was an inevitable weakness of the averages that, while used to regulate the future course of trade, they themselves were based on past prices; and this was a serious weakness in a commodity so fluctuating as wheat. The averages might be registering starvation while traders were dealing in plenty. Some check on this had been provided in 1815 for the protection of home growers from Near European shipments by the conditional revision of the averages at the end of six weeks. Otherwise they held for a period of three months. By the 1827 Act the averages were revised weekly on the following ingenious plan. The receiver of corn returns got out the average of each week, added that of the preceding five weeks, and then divided by six to get the aggregate average regulating the payment of duties. The principle is the same as that which was employed in the calculation of tithes. The method was retained in the two subsequent Corn Laws of 1828 and 1842, which embodied one further change. Up to 1828 no returns were taken from the inland districts. They were collected there for statistical purposes but were not used for the corn averages. In the list of 1828, Leicester, Birmingham, Nottingham and Derby occur for the first time. Peel's list of 1842 was obviously intended to include *all* towns of any importance, but not even in this last Act was there any town of Scotland or Ireland.

The story of the averages, although of itself, like the history of Poor Law Settlement, intolerably dull, yet throws sinister half-lights on a policy of agriculture which won applause for

promise more often than for performance. If the repeal of the Corn Laws did nothing else, at any rate it abolished a profession from which the country derived no benefit and which in 1846 was said to be very popular along the coast of Norfolk—the profession of “working the averages.” Riggers of the market or rum-runners, bootleggers or workers of the averages, they are all part of the human tribe whose absolution was pronounced in advance in paragraph “thirdly” of Article IV of Part II of chapter II of the Fifth Book of *The Wealth of Nations*.¹

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¹ Ed. Cannan, ii, 381.

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THE YIELD AND PRICE OF CORN IN THE MIDDLE AGES

THE great series of the account rolls of the Bishopric of Winchester, extending from 1208 to 1453, suggested to Dr. Hubert Hall and myself some years ago the possibility of constructing a new table of mediæval prices in England longer and more continuous than that of Thorold Rogers. Further examination of the sources has shown this hope to be justified. Delay in the preparation and publication of such a table has been due mainly to the wealth of new material continually unearthed by Dr. Hall and his assistants, and the end is not yet. Meanwhile the Winchester Rolls with which our investigation began can be used to throw light incidentally on another economic problem, that of the productivity of mediæval agriculture as judged both by the yield per acre and by the yield per quarter of seed used. The present paper gives some preliminary results which are subject to revision in detail.

The information used relates to nine out of the fifty or more manors included in the Winchester Rolls. They have been selected geographically—one from each of the counties of Somerset, Wilts, Oxford, Berks, Bucks and Surrey, and three from northern, central and southern Hampshire respectively. Similar information could be obtained for many or most of the other manors of the Bishopric, but it has not seemed worth while to extract it all. One of the manors—Esher in Surrey—proved to be a rye manor, growing little wheat, and for that grain eight manors alone are used. Bearing in mind the types of soil in these manors there seems to be no reason for suspecting that they are exceptional.

At the end of the grange account for each manor the total quantity of grain is given with details of the following items :

grain produced, grain brought forward from a previous year, grain bought during the year. In addition there are in some manors and some periods other entries, such as "church seed," "allowances to servants" at Downton and Witney, "increment of the granary" to about 1318, and charges "*super compotum*" after about 1288. These entries are followed by the acreage and the seed sown for the next year, and occasionally by the rate of seed used per acre. The yield per quarter of seed used and the yield per acre have to be calculated by comparing the produce in one roll with the acreage and the seed in the preceding roll. Dependence on two successive rolls for each year's figures means that there are more gaps in the series of yields than in the series of prices, and that there is occasional risk of putting together produce and seed or acreage which do not relate to the same area. For each of the manors, however, other than Esher, yield figures of wheat are available for from 106 to 143 separate years. Possibilities of error, through the cause named and through other more important causes, though they cannot be eliminated completely, have, it is hoped, been reduced to harmlessness. The main difficulties presented by the records are dealt with in a note at the end of this article.

Generally, it may be said, the figures of yield per quarter of seed are more trustworthy than those of yield per acre. The former, indeed, appear to be better than anything available for any other period in English history, not excluding the most modern times. The amount of grain actually used for seed to-day is not recorded in England, as it is in Australia, and agricultural text-books contain widely varying rules as to how much seed should be applied to each acre. For the comparisons made below, I have used the estimates adopted for statistical purposes by the Ministry of Agriculture of $2\frac{3}{4}$ bushels of wheat per acre, 3 bushels of barley, and $4\frac{3}{4}$ bushels of oats.

It is possible that in another respect also the mediæval figures are better than the modern ones. The produce in the former is the measured amount for which the bailiff accounted; modern figures of produce are based on estimates and, as Mr. J. A. Venn has pointed out, may now err systematically by defect.¹

The following table gives the location of each of the manors, the number of separate years for which yield figures of wheat can be given, and the areas covered by the returns in the first and the last half-century under review.

¹ ECONOMIC JOURNAL, September 1926.

TABLE I
Manors, Acreage and Years Included.

Manor.	County.	Average Acreage covered in Returns.						Years covered for Wheat.
		Wheat.		Barley.		Oats.		
		1200-49	1400-49	1200-49	1400-49	1200-49	1400-49	
Nailsbourne	Somerset	(87) ²	36	(7) ²	2	(117) ²	32	106
Downton	Wilts.	314	53	181	69	234	27	125
Witney	Oxon.	292	40	72	(56) ¹	212	(38) ¹	111
Wargrave	Berks	20	38	20	42	94	13	109
Wycombe	Bucks	156	59	22	33	160	37	116
Ecchinswell	Hants (N.)	90	45	13	18	93	29	140
Overton	Hants (Mid.)	43	41	49	44	182	42	143
Meon	Hants (S.)	371	153	144	45	467	113	137
Esher.	Surrey.	—	—	29	—	94	—	—

¹ 1350-99.² 1250-99.

The material for examination is not spread evenly over the whole period. During the first half of the thirteenth century and after 1425 there are more gaps in the series of rolls than during the fourteenth century. Moreover, the acreage to which the returns relate diminishes from the beginning to the end of the period, as more and more of the land is let at a rental or otherwise disposed of in place of being worked directly on the Bishop's account. Thus the total wheat area covered in the eight manors, excluding Esher, begins at about 1400 acres for the first half of the thirteenth century, and falls in successive half-centuries to 885, 682, 559 and 465 acres (in 1400-49). That for barley in nine manors goes from 500 to 253 acres; that for oats from about 1550 to 293 acres. Though some decline of wheat acreage is found in almost every manor, except where the acreage at the beginning was already small, both the rate of decline and the acreage covered vary considerably from one manor to another. It may be added that, taking the manors as a whole, the decline of acreage covered by the returns proceeds steadily. There is no sudden jump at the Black Death or at any other point. In this respect the present inquiry confirms Miss Levett's conclusion that "the estates of the Bishop of Winchester during the fourteenth century show no revolution either in agriculture or in tenure, but changes are effected by a continuous economic evolution."¹ It is perhaps possible to trace in the figures for twenty-five years after the Black Death a slight check in the rate at which the acreage directly farmed for the Bishop declined, but that is all.

¹ *Oxford Studies in Social and Legal History*, Vol. V. p. 142.

The results for the period from 1200 to 1450 as a whole are summarised in Table II, and the mean of the nine manors (eight only for wheat) is compared so far as possible with modern experience, that is to say, with the average for England in the twenty years from 1895 to 1914. The average yield per acre in the seven counties in which the manors lie is slightly but not significantly less than that for England as a whole. The latter has been used here as presumably better for comparison with the Ministry of Agriculture's estimates of seed used.

TABLE II

Yield of Corn in Certain Manors between 1200 and 1450.

Manor.	Seed in Quarters used per Acre.			Yield in Quarters per Quarter of Seed.			Yield in Quarters per Acre.		
	Wheat.	Barley.	Oats.	Wheat.	Barley.	Oats.	Wheat.	Barley.	Oats.
Nailsbourne	0.22	0.37	0.44	4.10	4.45	2.76	0.89	1.66	1.21
Downton .	0.32	0.46	0.50	3.01	3.62	2.52	0.96	1.68	1.27
Witney . .	0.32	0.47	0.61	2.97	3.78	2.18	0.96	1.76	1.33
Wargrave .	0.33	0.49	0.63	3.91	4.13	2.11	1.48	2.04	1.34
Wycombe .	0.35	0.50	0.61	3.33	3.95	2.49	1.16	1.98	1.53
Ecchinswell	0.28	0.45	0.49	4.98	4.27	2.81	1.37	1.94	1.38
Overton .	0.29	0.47	0.55	3.85	3.87	2.52	1.13	1.83	1.38
Meon . .	0.23	0.51	0.55	5.00	3.59	2.71	1.38	1.82	1.50
Esher . .	—	0.49	0.51	—	2.72	1.81	—	1.34	0.92
Mean of all Manors .	0.31	0.47	0.54	3.89	3.82	2.43	1.17	1.79	1.32
England, 1895-1914	0.34	0.38	0.60	11.40	10.99	8.57	3.92	4.12	5.09

The seed used per acre in the Middle Ages is for wheat and oats much the same as, though slightly less than, the modern estimate of the Ministry of Agriculture. For barley it is considerably more; whether this difference is due to a real change of practice, or to the manors not being typical of the whole country, or through error in the Ministry of Agriculture's estimate cannot be said with certainty.

The yield per quarter of seed used is very much less than in modern times. On the average of the eight or nine manors as compared with modern England, the productivity of wheat has gone up from 3.89 quarters of yield for each quarter of seed to 11.40, or nearly three times; the productivity of barley has gone up from 3.82 to 10.99—also just under three times; the productivity of oats has gone up from 2.43 to 8.57, or $3\frac{1}{2}$ times. It may be added that the eleven and a half fold yield of wheat in modern England corresponds to what is achieved in newer

countries like Australia, where the seed is sown much more thinly and the yield per acre is less.¹ A threefold increase in productivity of seed seems to measure broadly the difference between mediæval and modern farming.

The average yield per acre comes out for wheat at 1.17 quarters or 9.36 bushels; for barley, 1.79 quarters or 14.32 bushels, and for oats, 1.32 quarters or 10.56 bushels. The yield in modern times is about $3\frac{1}{2}$ times as great for wheat, $2\frac{1}{3}$ times as great for barley, and $3\frac{3}{4}$ times as great for oats. These figures under-state the advantage of modern times for three reasons. First, the mediæval yields are for the areas actually cultivated. If the acres were reckoned "as they lie," *i.e.* including presumably all the space wasted for various reasons under the open-field system, the acreage would be nearly doubled and the yield per acre approximately halved. The waste in modern cultivation is much less. Second, as has been stated above, there is ground for supposing that modern estimates of yield may habitually tend to be too low. Third, the modern quarter, partly owing to its slightly greater size and partly owing to the higher specific gravity of the grain, contains probably a substantially greater weight of wheat than did the mediæval quarter. According to Steffen the difference is that between 480 and 395 lbs. avoirdupois, *i.e.* an increase of over 21 per cent. It is impossible without much fuller inquiry to make accurate allowance for all these factors, but it seems likely that the weight of wheat got from any given area to-day may be from six to eight times, rather than $3\frac{1}{3}$ times, what it was in the Middle Ages.

The individual manors show considerable differences, ranging for wheat from a threefold to a fivefold yield, and from about 7 to nearly 12 bushels per acre. Meon, Ecchinswell and Nailsbourne have high productivity in relation to seed used for all three crops, except barley at the first-named; Witney, Downton and Wycombe are below or close to the average in every case. In yield per acre Wargrave stands out with Ecchinswell and Meon; while Downton and Witney and the lightly sown Nailsbourne are below the average. These differences appear to be related to the predominating type of soil in the various manors to-day, so far as that can be ascertained.

In the results given above the stretch of two and a half centuries from 1200 to 1450 has been treated as a whole. The next stage in the inquiry is to divide the whole period chrono-

¹ See note at end.

logically, so as to see whether any marked trend either of declining or of increasing productivity of agriculture can be discovered. This is done in Table III, giving for each manor figures similar to those in Table II, in five successive half-centuries.

The material, as stated, is not equally good in all half-centuries. Averages based on less than ten years' figures—as for Witney, Wargrave and Wycombe wheat between 1400 and 1450—are shown in brackets and should be disregarded; the marked fluctuation of yields from one harvest to another makes it unsafe to rely upon a few years only. For this and a number of other reasons already indicated—the different levels of productivity in particular manors, and their unequal and changing representation in the returns—it is difficult to combine their results into any one average figure which shall not be misleading. The figures given at the foot of each section of Table III, being the arithmetic means of the five manors—Nailsbourne, Downton, Ecchinswell, Overton, Meon—which run pretty well throughout the period, are probably open to less objection than most other averages that can be constructed. Looking at these, and disregarding for the moment the doubtful first half-century, two results seem to stand out pretty clearly for wheat :

First, the productivity of seed tends on the whole to rise a little. Second, the productivity of land has no significant movement either of increase or decline.

Barley and oats show increasing productivity of seed a little more markedly than does wheat, and with barley there seems to be an increase also in the productivity of land.

The second of the facts noted above for wheat is perhaps the most striking result of the whole inquiry. Broadly, over the whole range of 250 years from the beginning of the thirteenth to the middle of the fifteenth century, the productivity of the soil under wheat shows no general change of level.¹ In one particular manor—Ecchinswell—there seems to be an upward tendency; in another—Meon—there seems to be a downward tendency. The general impression is one of stability and stagnation. There is little sign either of material advance in agricultural methods or of that declining fertility of the soil which some writers have discovered in the later Middle Ages.

¹ This statement brings in the first half-century for which no satisfactory mean figure can be given for comparison with the other half-centuries. From 1200–49 to 1250–99 four of the manors show a decline and three an increase of yield per acre. Looking at all three crops the hundred years from 1250 to 1349 appear as a period of markedly low productivity of seed, a fact which may perhaps be evidence of exceptional climatic stress.

TABLE III
Use of Seed and Yield of Corn in Nine Winchester Manors from 1200 to 1449.

	WHEAT.					BARLEY.					OATS.				
	1200-49	1250-99	1300-49	1350-99	1400-49	1200-49	1250-99	1300-49	1350-99	1400-49	1200-49	1250-99	1300-49	1350-99	1400-49
A. Quarters of seed used per acre.															
1. Nallsbourne*	—	0.24	0.23	0.19	0.19	0.22	0.46	0.30	0.42	0.38	0.41	0.37	0.46	0.38	0.44
2. Downton*	0.33	0.31	0.32	0.31	0.31	0.32	0.36	0.49	0.50	0.50	0.50	0.46	0.50	0.50	0.50
3. Witney	0.26	0.37	0.33	0.30	0.29	0.32	0.36	0.49	0.50	0.50	0.50	0.47	0.54	0.51	0.61
4. Wargrave	10.36	0.37	0.38	0.38	0.29	0.38	0.43	0.50	0.50	0.50	0.50	0.49	0.62	0.62	0.63
5. Wycombe	0.38	0.37	0.34	0.31	0.31	0.35	0.49	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.61
6. Echinuswell*	0.22	0.36	0.28	0.30	0.28	0.28	0.40	0.49	0.44	0.47	0.50	0.45	0.50	0.50	0.49
7. Overton*	0.31	0.32	0.28	0.30	0.26	0.29	0.40	0.49	0.51	0.44	0.50	0.47	0.50	0.50	0.55
8. Meon*	0.23	0.38	0.29	0.25	0.25	0.28	0.36	0.69	0.51	0.50	0.50	0.51	0.53	0.50	0.55
9. Esler							0.48	0.50	0.49	0.50	—	0.49	0.51	—	0.51
* Mean of five Manors	(0.26)	0.30	0.28	0.27	0.26	0.28	(0.38)	0.46	0.46	0.47	0.48	0.45	0.50	0.48	0.51
B. Quarters of produce per quarter of seed.															
1. Nallsbourne*	—	3.07	4.33	4.58	4.31	4.10	—	3.55	4.80	4.67	4.10	4.45	2.82	2.95	3.49
2. Downton*	2.73	2.48	3.43	3.41	3.20	3.01	4.53	2.55	3.90	3.83	3.94	3.02	2.64	2.74	3.10
3. Witney	2.04	2.80	3.01	3.27	2.68	2.97	4.40	3.86	4.25	3.32	—	3.78	2.06	2.31	—
4. Wargrave	15.81	3.98	4.06	3.72	3.28	3.91	[5.63]	3.77	2.94	4.11	[3.36]	4.13	1.71	2.34	[3.04]
5. Wycombe	3.74	3.91	3.04	3.78	2.51	3.33	4.69	3.53	3.64	4.20	[4.06]	3.95	2.13	2.88	[2.05]
6. Echinuswell*	5.67	4.50	4.46	4.90	6.10	4.98	4.45	4.10	3.24	4.22	5.00	4.27	2.25	2.80	2.49
7. Overton*	3.69	4.24	3.66	3.55	4.33	3.85	4.15	3.59	3.54	3.93	4.61	3.87	2.07	3.38	2.52
8. Meon*	5.19	4.44	5.26	5.25	4.66	5.00	3.89	3.56	3.47	3.42	—	2.72	2.43	2.86	3.63
9. Esler							3.12	2.78	2.72	2.42	—	2.72	1.88	1.80	—
* Mean of five Manors	(4.14)	3.75	4.23	4.34	4.54	4.19	(4.28)	3.47	3.80	4.01	4.31	3.96	2.44	2.87	3.59
C. Quarters of produce per acre.															
1. Nallsbourne*	—	0.75	0.98	0.87	0.81	0.89	—	1.07	2.02	1.77	1.68	1.66	1.11	1.31	1.21
2. Downton*	0.90	0.77	1.10	1.07	1.02	0.96	2.07	1.02	1.96	1.91	1.97	1.68	1.30	1.55	1.27
3. Witney	0.77	1.04	0.98	0.97	0.76	0.96	1.58	1.91	2.12	2.04	1.68	1.76	1.11	1.38	1.21
4. Wargrave	1.49	1.49	1.53	1.42	1.21	1.48	[2.71]	1.51	2.92	2.04	[1.68]	2.04	1.16	1.17	1.33
5. Wycombe	1.41	1.09	1.04	1.18	0.79	1.16	2.30	1.64	1.66	1.98	[2.03]	1.98	1.06	1.44	[1.75]
6. Echinuswell*	1.23	1.18	1.24	1.49	1.69	1.37	1.75	1.77	1.43	1.92	2.49	1.94	1.23	1.52	1.63
7. Overton*	1.15	1.34	1.04	1.08	1.13	1.13	1.65	1.77	1.33	1.40	2.29	1.83	1.06	1.40	1.38
8. Meon*	1.17	1.67	1.52	1.33	1.16	1.38	1.40	2.46	1.78	1.72	—	1.82	1.28	1.44	1.69
9. Esler							1.50	1.38	1.32	1.21	—	1.34	0.96	0.92	—
* Mean of five Manors	(1.02)	1.14	1.18	1.17	1.16	1.15	(1.59)	1.59	1.75	1.86	2.07	1.79	1.21	1.37	1.35

The result suggests inquiry as to when and how the three-fold increase in the productivity of seed between mediæval and modern times took place. The material for answering that question, not on generalisations as to yield at various dates by agricultural writers, but from actual farming records, has not yet been discovered and is probably not to any large extent in existence. Some farming records scattered through the centuries between the fifteenth and the nineteenth there must be, and search for them might be repaid. The difficulty would be to get enough of them to be sure that they presented a fair picture; since the Winchester Rolls ended, the farmer who kept accounts has not been typical. Two seventeenth-century accounts examined for me by Dr. Hall yield interesting but discrepant results. One account,¹ kindly communicated by Captain Loder Symonds, R.N., gives for the nine years 1612 to 1620 a yield of 11.83 quarters of wheat and 7.14 quarters of barley for each quarter of seed used; in the best year the wheat yield was more than twenty-fold. These results clearly represent exceptionally good farming; wheat is just above the modern figure. Another account, apparently for newly enclosed woodlands at Peckham, covers three or four years only between 1639 and 1651. The yield of wheat per quarter of seed ranges from 3.90 quarters to 5.55, and per acre from 1.46 quarters to 1.83; the advance on mediæval times is much less.

All the figures given above are averages taking in many years together. They are based on separate figures for single years which it is proposed to publish later. Meanwhile it may be stated that the yearly figures show, as might be expected, a marked variation of yield according to harvest conditions, and that their movement shows a strong negative correlation with the movement of prices. Analysis of the yearly figures should yield interesting comparisons as to the range of variation from good to bad harvests in mediæval and modern times respectively.

The present article is concerned primarily with the yield of corn. Detailed examination of prices would not be worth while in view of the fuller information now in course of preparation. Certain figures, however, may be worth giving, even at this stage, and are set out in Tables IV and V.

The first of these tables shows, for successive half-centuries from 1200 to 1450, the average prices of grain, live-stock, wool and salt as derived from the records of the nine Winchester Manors and from Thorold Rogers. The second table represents some of the same prices as index-numbers on the basis: Mean

¹ For Wargrave in Berkshire.

of 1300-49 = 100; in this table the Winchester Manor prices (W) are given in roman type and Rogers' prices (R) are given just below in italics. Wool and live-stock other than oxen and sheep are omitted from this table, as the material is less satisfactory than for the articles. On the other hand, there is added an index-number based on Rogers' figures for a number of articles not of an agricultural character.¹ Table V presents several suggestive results which may be briefly indicated.

TABLE IV
Prices of Commodities 1200 to 1450 (in shillings).

Commodity.	Unit.	1200-49.	1250-99.	1300-49.	1350-99.	1400-49.	1200-1449. e
Nine Winchester Manors.							
Wheat	Qr.	4-01	5-52	6-33	6-89	6-34	6-05
Barley	"	2-66	3-88	4-48	4-59	3-74	4-05
Rye	"	3-68	4-68	5-29	5-34	—	4-87
Oats	"	1-60	2-35	2-63	2-72	2-05	2-36
Salt	"	1-87	2-60	3-62	6-05	4-68	4-11
Wool (Great) ¹	Clove	1-42	1-86	2-31	1-85	2-04	1-92
" (Lambs) ²	"	1-10	1-55	1-99	1-38	1-20	1-43
Oxen	Each	7-97	10-46	13-30	14-92	14-19	12-76
Cows	"	7-05	8-55	9-18	10-40	9-02	9-24
Sheep (Muttons)	"	1-15	1-33	1-32	1-79	1-71	1-53
Ewes	"	1-04	1-13	1-21	1-49	1-35	1-28
Hoggasters	"	0-64	1-01	1-24	1-47	1-37	1-28
Lambs	"	0-28	0-58	0-70	0-90	0-93	0-81
Rams	"	—	1-27	1-64	1-83	2-08	1-75
Rogers' General Averages.							
Wheat	Qr.		5-35	6-01	6-13	5-77	5-83
Barley	"		3-91	4-25	4-08	3-67	3-97
Rye	"		4-39	4-60	4-24	4-07	4-32
Oats	"		2-19	2-48	2-61	2-17	2-37
Salt	"		2-77	3-87	6-40	4-82	4-55
Wool ³	Clove		2-14	2-14	2-11	1-77	2-03
Oxen	Each		10-75	13-05	14-87	18-45 ⁴	14-44 ⁴
Cows ⁵	"		7-43	9-94	10-62	—	9-55
Sheep (Muttons)	"		1-68	1-92	2-06	2-11	1-97

¹ Rarely more than one entry in a year after 1325.

² Before 1375 very few entries each year.

³ Great wool to 1401, mixed thereafter.

⁴ 1400-49—"Highest price."

⁵ "Highest prices of." This is the only set which runs through the two volumes of Rogers.

⁶ Rogers figures are for 1259-1449.

First, there is a satisfactory general agreement between Rogers' figures and mine, though the material used is entirely different. The mean of the former as given at the foot of the

¹ Lime, laths, plain tiles, wrought iron, canvas, cloth, board nails, lath nails, shirting, candles, slates, charcoal, paper (the last five only after 1400, the first eight throughout the period 1260-1450).

table runs 87, 100, 112, 99, and that of the latter 86, 100, 119, 104; the last figures in each list would be closer together if it had not been necessary to omit rye from my figures and oxen from Rogers'. The correspondence is closest where the material is best—as for wheat, barley, oats, oxen and salt. The most striking case is that of salt, where the abnormal rise in the half-century after the Black Death and the decline thereafter are recorded in all but identical figures.

Second, there is a rapid rise of prices between the first two periods taken, that is to say, from the first half to the second half of the thirteenth century. This is only the slackening end of a movement which other figures show beginning about the middle of the twelfth century and which, when fully examined, may prove to have been one of the most violent price revolutions in English history, comparable in speed to the revolution of the sixteenth century, though not having equal social and economic consequences.¹ The mean figures show a further increase at a slower rate from the second to the third and from the third to the fourth of the periods taken, and a decline to the last (1400 to 1449). But whereas the movements up to 1300–49 are much the same for all the articles, those after it are divergent. The use of the mean is dangerous; still more is the use of the price of any one article as a guide to the general purchasing power of money.

This is the third and most important point to be made. Comparisons of money wages with the price of wheat have led to the building up of a theory of a "golden age" for the labourer in the fifteenth century, between the rapid rise of wages following the Black Death and the rise of prices following the discovery of America. A well-known and impressive chart in Steffen's *Studien zur Geschichte der Englischen Lohnarbeiter*² shows the labourer's daily wage in terms of wheat rising swiftly from the first half of the fourteenth century, and between 1450 and 1500 ranging at heights never approached again till the last quarter of the nineteenth century. Steffen's chart, coupled with the evidence now adduced as to the unchanged productivity of agriculture at least up to 1450, might even be taken as a great historic illustration of Malthusian truths. Might it not appear as if, after the Black Death had beneficently halved the population, the standard of real wages, though there was no increase

¹ Preliminary results suggest that the prices of wheat and live-stock of all kinds doubled or trebled in fifty years from the third quarter of the twelfth to the first quarter of the thirteenth century.

² Vol. I. p. 112 of the German edition of 1901.

of technical skill, rose rapidly, that there were then two or three happy generations, but that, alas! they generated too freely, so that, even before the great rise of prices in the sixteenth century, real wages began to fall headlong till they reached starvation level about 1600, and stayed at or little above it till about 1830.

TABLE V
Index Numbers of Prices, 1200 to 1450.
(Mean of 1300-49 = 100.)

		1200-49.	1250-99.	1300-49.	1350-99.	1400-49.
Wheat {	W	63	87	100	109	100
	R	—	89	100	102	96
Barley {	W	59	87	100	102	83
	R	—	92	100	96	86
Oats {	W	61	89	100	103	78
	R	—	88	100	105	87
Rye {	W	70	88	100	101	—
	R	—	95	100	92	88
Oxen {	W	60	79	100	112	107
	R	—	82	100	114	—
Sheep {	W	87	101	100	136	130
	R	—	88	100	107	110
Salt {	W	52	72	100	167	129
	R	—	72	100	165	125
Mean of above articles . . . {	W	65	86	100	119	104
	R	—	87	100	112	99
Other articles . . .	R	—	84	100	177	174

W = Mean of nine Winchester Manors; R = Rogers.

For sheep, Rogers' prices are the "highest prices."

Serious examination of this or other theories of the "golden age" is beyond the scope of this article, and must wait on fuller information. All that can be done here is to call attention to the discrepant movements of the prices of different articles in the later part of Table V, that is to say after the Black Death. Wheat, on the average of half-centuries, remains near the general level of 1300-49; the other grains—barley, oats and rye—show a decline; wool also, though the figures need further examination, almost certainly shows a decline. On the other hand, salt and live-stock of all kinds (except cows) are more costly in the first half of the fifteenth than in the first half of the fourteenth century. So, most markedly, are the non-agricultural articles from Rogers' work included in the last row of Table V. How closely the prices for these articles at different times are comparable with one another, *i.e.* how far they represent equivalent

articles, it is impossible without further investigation to say. But the rise of 77 per cent. shown from the first half to the second half of the fourteenth century is so great that it can hardly be unreal.

With figures such as these, the movements of any general index-number of prices will depend very much upon the weights assigned to different articles. The construction of such an index-number must wait till more and better material has been made available, and the actual turning-points in price movements need to be examined more closely than by half-centuries. The present figures of price are put forward to serve mainly a negative and warning purpose.

W. H. BEVERIDGE.

NOTES ON MATERIAL AND TABLES

Apart from the causes of occasional error noted later, the two main difficulties in interpreting the material arise from (a) variations in the mode of reckoning the acreage and (b) the entries of charges "*super compotum*."

Acres in the accounts are reckoned either "by the perch," representing apparently a true measurement of the land actually cultivated, or "as they lie," representing apparently an estimate in which might be included all the land wasted as balks, grass patches, field roads and the like under the open-field system. In two of the manors (Wargrave and Wycombe) the acres are expressly given by the perch throughout, and in two others (Downton and Esher) they clearly are so reckoned throughout though it is not always expressly stated. In Nailsbourne the reckoning, though never expressly defined, is obviously on the same basis throughout, and has been taken as a measurement by the perch; it is possible but not likely that this is wrong and that the error accounts for the low seed and yield per acre. In the other four manors the method of reckoning varies, being sometimes "by the perch" and sometimes "as they lie." Fortunately the giving of the seed used makes it possible to control this, and by a very simple calculation to get back in practically every case with reasonable accuracy to the true acreage. The seed used for any given area does not vary rapidly from one year to the next. The reckoning of acres "as they lie" is practically confined to years between 1283 and 1318 and to the three Hampshire manors and Witney. For Eechinswell from 1283 to 1318, Overton 1302 to 1318, Meon 1302 to 1318 and Witney 1306 to 1318, the nominal acreage "as they lie" has been re-calculated by reference to the seed used.¹

The entries of charges "*super compotum*" relate to an interesting procedure, under which the Bishops' auditors apparently fixed the rate of yield to be expected; the difference between the produce at that rate and the actual produce is entered, *plus* or *minus*, as something with which the bailiff is charged at the end of his account. The difference between the rated and the actual produce, whether *plus* or *minus*, is not as a rule great, and the latter has normally

¹ For some other years, e.g. Witney 1299 to 1305, 1367 to 1388, and Overton 1291 to 1301, the acres are given "as they lie," or "as they lie in the fields," but the seed figures show that the calculation was substantially by the perch. It may be added that in most cases the correction has amounted roughly to halving the acres "as they lie," though for wheat and oats at Meon the reduction is greater—to one-third. Halving corresponds well with an actual figure in a rental of 1458 found by Dr. Hall, where the same area is 32 acres "by the perch" and 61 acres "as they lie."

been used here as representing the achieved rather than the estimated results. Occasionally, however, the actual produce is much below the rated produce, and gives an impossible yield figure. In such cases it is clear that part of the actual produce must have been brought into account for special reasons (*e.g.* late returns or damage to crop by trespass), after the account was closed; the rated produce has been taken accordingly. The rates of yield set by the auditors furnish an interesting supplement to the other figures. They suggest, for instance, that the apparent increase in the productivity of Ecchinswell towards the end of the period was real and does not arise through error in the figures; the rates set, so far as they have been extracted, are definitely higher between 1400 and 1450 than before.

In addition the following minor difficulties occur:

1. Grain remaining from a previous year does not often occur, and if it does is noted, so that it does not enter into the produce of the current year. But in some cases at least it may have been brought in after the previous year's account was made up, and so may have been excluded wrongly from that year's produce.

2. The sowing of more than one variety of the same grain, *e.g.* winter and palm barley, or lesser and great oats, in the same manor in the same year sometimes causes uncertainty.

3. "Increment of the granary" is always about one-eighth of the other produce. Apparently heaped bushels went into the granary, and this is the difference between the heaped and the rased bushel. Such entries have been included throughout.

4. "Church seed," not being produce, has been excluded throughout.

5. Acreage sown for servants' allowances appears in the Downton and Witney accounts in certain periods. It has been excluded throughout, as the produce is entered always at an arbitrary low rate.

Generally the points mentioned above, while they have given much trouble in the preparation of the statistics and while they make it impossible absolutely to rely on the figures for each individual year, are not such as to throw doubt on the substantial accuracy of the main results.

The seed per acre in each manor both for the whole period and for the successive half-centuries has been got not as an average of annual figures, but by dividing total seed by total acreage, omitting years in which acres are reckoned "as they lie."

The yield per seed in each manor is got by dividing total produce by total seed, for all years.

The yield per acre in each manor is got by dividing total produce by total acreage, for all years (acres "as they lie" being reduced to correct acres by reference to the seed used in the years of correct acreage in the same period).

The means are the arithmetic means of eight or nine manors (Table II) or five manors (Table III). For 1200-49 the mean of the five manors has been deduced from that for 1250-99 in the ratio of the means including and excluding Nailsbourne; it is shown in brackets in Table III.

The following notes apply to Table III.

Downton (for wheat 1306-1449) and Witney (for wheat 1325-1449) have been corrected by omitting acreage sown for servants.

Witney (for wheat and oats 1300-49), Ecchinswell (for all grains 1250-1349), Overton and Meon (for all grains 1300-49) have been corrected in "A. Quarters of Seed used per Acre" by excluding the years in which acres are reckoned "as they lie," and in "C. Quarters of Produce per Acre" by deducing acreage for these years from seed used.

The bracketed figures for certain manors in certain periods are averages for less than ten years.

In Australia the seed used per acre in the decade 1905-14 averaged .938 bushels and the produce 10.22 bushels, an eleven-fold yield. For 1915-24 the productivity is nearly fourteen-fold, with seed .921 bushels and produce 12.79 bushels per acre.

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W. F. LLOYD'S LECTURE ON "THE NOTION OF VALUE" (1833)
REPRINTED

WILLIAM FORSTER LLOYD was the third son of Thomas Lloyd, Rector of Aston-sub-Edge, Gloucestershire, but a resident of Great Missenden, and a schoolmaster there of considerable reputation. The eldest brother died at Eton. The second brother was Dr. Charles Lloyd, Regius Professor of Divinity and, at the same time, Bishop of Oxford, a pioneer of the Oxford Movement, Peel's tutor at Christ Church, and later his constant correspondent on various subjects. They agreed in endorsing Ricardian doctrine at the time of the Resumption of Cash Payments Committee (1819). It is not known whether the divine consulted his economist brother on what to say to Peel. They were both living in Christ Church at the time.

W. F. Lloyd was born in 1795, entered Westminster School as a scholar in 1807, was captain of Westminster in 1811, was elected to Christ Church in 1812, became mathematical lecturer at Christ Church 1816-1824 and Reader in Greek in 1823. In 1832 he was appointed to the Drummond Professorship of Political Economy in the University of Oxford in succession to Whately (who followed Nassau Senior), a position which he held, as was normal then, for five years. In 1834 he was elected a Fellow of the Royal Society.

In 1830 he published "*Prices of corn in Oxford in the beginning of the fourteenth century: also from the year 1583 to the present time,*" which recalls the greater work of Thorold Rogers, who later held the same chair. As Professor, Lloyd published one lecture a year in compliance with the statute. In the second lecture thus printed, on "The Notion of Value," Lloyd anticipated the Jevonian concept of final utility. While Jevons gave it to the world with some blare of trumpets and intimations of a Copernican revolution, Lloyd felt impelled to plead the statutory requirement as an excuse for publication. Learning has suffered from Lloyd's modesty.

These professorial lectures were collected in 1837 and published under the title, *Lectures on Population, Value, Poor-Laws, and Rent*, by Roake and Varty, of London, and Parker, of Oxford.

His stock seems to have been a weak one. The eldest brother died at 18, the bishop at 45, and he himself went into absolute retirement at 42, on the termination of his professorship. His mind was keen and luminous; but his ambition was evidently in harmony with his physique. His intellect triumphed in its own battlefield, but it did not triumph over his body; there was no struggle against waning powers; there was no desire for achievement. He lived for fifteen years in obscurity at Great Missenden and died at the age of 57.

Since the lecture on "The Notion of Value" is of great rarity, it has been thought worth while to reprint it below. Attention was first drawn to the interest of this document by Professor Seligman in the *ECONOMIC JOURNAL* of September 1903, and the proposal that the Royal Economic Society should reprint it is due to Lloyd's successor in the Drummond Chair, the late Professor Edgeworth.

R. F. HARROD

A LECTURE
on
THE NOTION OF VALUE,
as
Distinguishable Not Only From Utility,
but also from
VALUE IN EXCHANGE
Delivered before the University of Oxford,
In Michaelmas Term 1833,

By the
REV. W. F. LLOYD, M.A., F.R.S.
Student of Christ Church, Professor of Political
Economy.

ADVERTISEMENT

It is provided in the Statute by which the Professorship is founded, that one Lecture in each course shall be annually published. In compliance with this provision, the following Lecture, delivered in Michaelmas term, 1833, is submitted to the public. The author thinks it necessary to state this, to account for the abruptness of the beginning, which has reference to a former Lecture of the course.

LECTURE, etc.

In my last lecture, I treated, in the first place, of the subject of utility, and afterwards proceeded to consider the sense in which Adam Smith applied the term value, while inquiring respecting the real measure of exchangeable value. I then endeavoured to show, that he could not generally mean by it the power of purchasing other goods which the possession of any object conveys—a meaning, which involves necessarily a comparison, and therefore a relation, of different objects, while the context seemed to refer to something positive and absolute—to something, which could be understood as belonging to a single object, taken by itself and without reference to other subjects. From an examination of some particular passages, I collected that, in those passages at least, he was using the term in the sense of the real importance of an object to the person possessing it, and that he made this importance to depend on the difficulty of attainment. I now proceed to the further consideration of this view of the subject.¹

A question has been sometimes agitated respecting the possibility of a general glut of commodities, or, in other words, of universal over-production. A glut of commodities of any one species is on all hands admitted to be not only a possible but frequent occurrence. So likewise, but in a decreasing degree of probability and frequency, of two, three, four, or more species. All, therefore, that is denied is the probability of its extending at once to the majority of commodities, and the possibility of its being universal. I mention this question, not with the view of entering on the full consideration of it at present, but only because it will be useful to my purpose to draw attention to some of the arguments advanced by those who maintain the negative side. A general glut of commodities is, they say, the same thing as a general superabundance of wealth, and would indicate the full satisfaction of all human wants; but that there is, in fact, no assignable limit to the desires of mankind; for when one inconvenience is removed, others present themselves, which before had never been thought of; and thus the passion for wealth expands with the gratification of existing wants, and, if not absolutely infinite, may at least be termed indefinite; being capable of extending itself far beyond any bounds, to which the most enthusiastic imagination can believe that the power of human production will ever reach.

Now, though it may be reasonably urged, that these argu-

¹ *Wealth of Nations*, Book I, Ch. 8, *init.*

ments do not bear immediately upon the main question respecting a glut of commodities, which is concerned rather with the remuneration of the producers than with the disposition to consumption, yet no one can doubt the general truth of the propositions themselves. Nobody, for example, can maintain that, were the aggregate incomes of all persons in this country to be increased tenfold, they would find any difficulty in disposing of them.

Nec Croesi fortuna unquam nec Persica regna
Sufficient animo—(Juvenal)

is an apt quotation which I have met with in relation to this subject, and contains a truth acknowledged by philosophy and confirmed by the experience of mankind.

But whether these arguments be applicable or not to the question of a glut, they would not, I think, be even true in themselves, if the objects which can gratify human wants were limited in the number of their kinds. It is only the multiplication of the kinds of wants which renders the passion for wealth unlimited. The wants of savages, for example, are confined to a few of the most necessary articles, such as food and clothing, and even of these they have not a sufficiency. Supposing, however, for a moment, that the catalogue of their wants could remain invariable, it is not difficult to conceive the means, by which their existing wants might be fully gratified. They might be fed to satiety, and clothed to satiety, and thus, (all new wants being excluded by the hypothesis,) the final sum of their wealth would be reached, and all further production would be useless.

The same would be true of more civilized societies, were their wants in like manner limited to any determinate number. If no books of any other description had ever been wanted than such as existed at the time when printing was invented, this art might soon have multiplied copies to a degree fully adequate to the supply of all. The same is true of every other particular commodity; and thus, it is the infinite variety of wants, and of the kinds of commodities necessary to their gratification, which alone renders the passion for wealth indefinite and insatiable. In the case of each *species infima*, as logicians call it, the desire is limited.

It is now time to point out in what manner these observations bear upon the question which is directly before us. We have come to the conclusion, that an increase of quantity will at length exhaust, or satisfy to the utmost, the demand for any specific object of desire. Having reached this point, let us now inquire, what happens, with respect to value, at the time when the demand

or want is thus fully satisfied? It will be found that, in the case of every commodity, its value vanishes at the very instant of satisfaction. Take, for example, water. Water is valueless, or nearly so, except under some special circumstances, by reason of its abundance. Every person has at his command more than is sufficient for every purpose to which he can wish to apply it. He has, therefore, no reason for being sparing in its use. If any remains after satisfying the present occasion, he has no cause for hoarding it, or for making a property of it, or debarring others from the use of it. I mention these particulars, because, where they are present, they are sure indications of value, and, according to their intensity, so is the intensity of the value. We are sparing in the use of a valuable object, because we can thus make it last the longer, and we wish to make it last the longer because, when spent and consumed, it cannot easily be replaced. We hoard it, we appropriate it, we debar others from the use of it, for the same reason. In the reasons, therefore, which exist for preserving and for retaining the possession of an object, its value essentially consists. It has with great propriety been defined to mean the esteem in which an object is held. But to make the definition complete and easily intelligible, some further explanation may perhaps be necessary.

Let us suppose the case of an hungry man having one ounce, and only one ounce of food at his command. To him, this ounce is obviously of very great importance. Suppose him now to have two ounces. These are still of great importance; but the importance of the second is not equal to that of the single ounce. In other words, he would not suffer so much from parting with one of his two ounces, retaining one for himself, as he would suffer, when he had only one ounce, by parting with that one, and so retaining none. The importance of a third ounce is still less than that of the second; so likewise of a fourth, until at length, in the continual increase of the number of ounces, we come to a point, when, "through that infallible specific, eating," the appetite is entirely or nearly lost, and when, with respect to a single ounce, it is a matter of indifference whether it is parted with or retained. Thus while he is scantily supplied with food, he holds a given portion of it in great esteem—in other words, he sets a great value on it; when his supply is increased, his esteem for a given quantity is lessened, or, in other words, he sets a less value on it.

Hence the appetite for food may be compared to a spring, a watch-spring for example, which, when fully compressed, or wound up, has the greatest tendency to expansion. By degrees,

as it becomes more and more actually expanded, its tendency to fly out is diminished, until at length it ceases altogether.

The case is the same with respect to all other commodities. There may be a certain amount of convenience in having a time-piece in every room of a house; still the convenience of the first, that is, the importance of having *one*, is probably greater than that of all the rest put together. So, a person who has one house may wish to have a second, but still the want of the second is not equal to that of the first.

Each different kind, therefore, of human wants may, like that of food, be compared to a spring; and, in this comparison, the different wants, according to their several differences, will be represented by springs of different degrees of strength. For example, the wants which food can satisfy will be represented by a spring of great power. So also those to supply which water is required. For representing the wants of clothing and fuel, which are articles not so indispensably necessary to human existence, springs of an inferior degree of power may suffice. Passing on to the artificial wants, we may represent them according to their intensities, by lesser springs of various degrees of strength.

Let us enter a little more minutely into this comparison. We can imagine a spring of such strength that a weight of many tons shall be required in order that its elasticity may be fully and entirely confined. Yet when some play has been allowed to it, a less force shall be sufficient to retain it in its new position. And as it approaches the limit of its power of expansion, the force even of the hair-spring of a watch shall be sufficient to keep it in its place. There are, therefore, two ways in which the same two springs may be compared. We may compare them absolutely, as when we say that the main-spring of a watch is stronger than the hair-spring; or, on the other hand, we may compare their expansive forces under some stated modification of their actual conditions; as, in the instance of a watch which is nearly down, and on the point of stopping,¹ we may say that the main-spring has scarcely more strength, that is, in its actual state of expansion, has scarcely any greater tendency to expand itself further than the hair-spring has, when it is most contracted.

I direct your attention to these two modes of comparing the same two springs, because I think they may serve to illustrate the difference between utility and value. We estimate the utilities

¹ I here suppose the watch to stop because the spring is exhausted, not because the chain is come to an end. And this would be the case practically if the chain were made long enough.

of objects by the importance of the wants they are capable of supplying, considered absolutely; in the same manner as when we say that the main-spring of a watch is stronger than the hair-spring. As the main-spring remains equally strong whether the watch be wound up or unwound, so a difference in the degree in which any want is supplied makes no difference in the utility of the object which can supply it. Water is no more useful in a ship at sea, where it is scarce, than on land, where it is plentiful. The utility of corn is the same after an abundant harvest as in time of famine.

But the wants, on which value depends, are analogous to the tendencies of springs, which are already in part extended, to extend themselves further. They vary with every variation in the quantity of commodities, and in the consequent variation of the degree in which the absolute want is satisfied, as the expansive tendency of a spring varies with every variation of the degree of its actual expansion. According to this mode of considering the force of a spring, the force of the main-spring of a watch may, as I have already mentioned, be less than that of the hair-spring; and, according to the analogous mode of considering wants, the want of the most useful may be less than that of the least useful articles. Water is more wanted by a man almost dying with thirst, than by another who has quenched his thirst, and desires only to wash himself. It is on want, thus estimated, that value depends. It is not the same thing as the want, but it is proportional to it, and arises out of it. The gratification derivable from the use of an object must be taken to be equal to the want of it, thus estimated; and the value, properly speaking, is the feeling of affection or esteem for the object, arising from a sense of the loss of the gratification contingent on the loss of the object. In its ultimate sense, then, the term undoubtedly signifies a feeling of the mind, which shows itself always at the margin of separation between the satisfied and unsatisfied wants. One point, amongst others, in which it differs from utility, is, that it attaches only to an object in possession, while, with respect to the idea of utility, possession is a matter of indifference.

I think that the distinction which I have pointed out between the ways in which the forces of any two springs may be compared, will be found, if considered with attention, to throw great light on the difference between utility and value, to mark their respective limits, and to show clearly the point of contact, where the one idea is apt to pass into the other, and where the danger of confusion is mostly to be apprehended. It must, however, be

borne in mind, that the analogy subsists, only between the two ways in which the forces may be compared, and those in which human wants may be compared; and not immediately, between the two ways in which the forces may be compared, and the relation which subsists between the ideas of utility and value. The contemplation of this analogy will serve to explain the two different ways of considering human wants, and these being understood, it is then easy to pass on to the ideas of utility and value, which are connected with the different wants, and naturally arise out of them.

I intimated just now that there was danger of confusion. If, to a man who has already half a dozen coats, you should offer to give another, he might probably reply that he would have no use for it. Here, however, he would speak, not of the abstract utility of the coat, but of its special utility to him under the circumstance of his want of coats being already so far supplied. This, though not quite the same thing as value, approaches very near to it. The coat would be of no use to him; therefore, were he to have it, it would not be valuable in his estimation. He would have no reason for retaining the possession of it, or, were he to lose it, to regret the loss. But this is very different from the utility of the coat in the general sense of utility, and ought not to be confounded with it.

Perhaps the following may be a good rule for distinguishing between utility and value; and, if it is borne in mind, there will, I think, be little danger of confounding the two ideas. To obtain the idea of the utility of an object, imagine what would happen, what inconvenience would arise, from the loss, not of that object alone, but of the whole species to which that object belongs. Thus, to obtain the idea of the utility of water, imagine the predicament we should be in, were we deprived, not of a pailful which may chance to be before our eyes, and may stand destined to some particular use, but of the whole element of water. But value, as I have already mentioned, attaches to an object in possession, which, consequently, cannot be unlimited in quantity. To obtain, therefore, the idea of value, imagine yourselves deprived, not, as before, of the whole of the species, but only of the possession of a certain definite quantity. Take again, for example, the instance of the pail of water, and suppose it to be overturned. Its value would then be estimable, either by the inconvenience which would be felt, supposing the particular want which it was intended to supply to remain unsatisfied, or by the trouble of going to the well again, whichever might be

least. I may here remark that, though in the course of this lecture I have spoken of water as valueless, and it is the example commonly adduced of a very useful article quite destitute of value, yet this is only to be understood of exchangeable value. Water in possession has almost always some value. But this value, under ordinary circumstances, is small, and not equal to the trouble of an exchange. And on this account water rarely becomes the subject of exchange.

I have here been incidentally led to the mention of exchanges. But it is to be observed that, throughout the explanation, upon which I have hitherto been engaged, of the nature of value, there has been no need for one word about exchanges. As I have explained the idea, it consists in the real importance of an object to the person who possesses it—a definition, which may be collected from a passage of Adam Smith, as I mentioned in my last lecture. And objects may be of real importance to the person who possesses them, as much in the case of an isolated individual, such as Robinson Crusoe, as in the case of a society, such as exists in England, and in all other countries with which we are acquainted. The commercial intercourse, however, to which we are accustomed, and in which the idea of value is commonly more or less blended with that of an exchange, has been so long established, that it requires some effort of the imagination to form a distinct idea of value by itself, disengaged, on the one hand, from value in exchange, and, on the other, from the mere notion of utility. It would be difficult to collect the necessary illustrations from the facts and occurrences with which we are familiar; and cases purely hypothetical are less interesting and less instructive. I have been looking into *Robinson Crusoe* for examples of value, but have not found any thing so much to the point as I could have wished. Still the complete separation of the idea appears to me to be so necessary a preliminary, in order to a clear conception of the nature of value in exchange, and of the causes which determine it, that I think it not amiss to read to you the following passages, which are the best that I have been able to find.

I presume you to be all acquainted with the life and adventures of Robinson Crusoe. It will be remembered that in shaking out an old bag which he wanted for some purpose, he unconsciously sowed a few grains of barley and rice, which had chanced to remain in the crevices of the bag. After mentioning that these took root, sprung up, and ripened, the narrative proceeds thus :—

“I carefully saved the ears of this corn, you may be sure, in their season, which was about the end of June; and laying up

every corn, I resolved to sow them all again; hoping in time to have some quantity sufficient to supply me with bread; but it was not till the fourth year that I could allow myself the least grain of this corn to eat, and even then sparingly, as I shall show afterwards in its order."

In all this, he showed his sense, not merely of utility, but also of the value of his corn. I proceed, however to another passage.

"After I had been in my cave for some time, and found no more shocks of the earthquake to follow, I began to be somewhat more composed. And now, to support my spirits, which indeed wanted it very much, I went to my little store, and took a small sup of rum, which, however, I did then and always very sparingly, knowing I could have no more when that was gone."

His rum was valuable. Now let us see what he says about his ink.

"A little after this, my ink beginning to fail me, I contented myself to use it more sparingly; and to note down only the most remarkable events of my life, without continuing a daily memorandum of other things." Again:

"The next thing to my ink being wasted, was that of my bread—I mean the biscuit, which I had brought out of the ship: this I had husbanded to the last degree, allowing myself but one cake of bread a day for above a year; and yet I was quite without bread for nearly a year before I got any corn of my own."

In another passage he mentions finding on the sea-shore an infinite variety of fowls, on which he observes,

"I could have shot as many as I pleased, but was very sparing of my powder and shot."

I will not stop to remark farther on these passages, than that all this caution in the consumption of the different articles which he had saved from the ship, indicated a sense of their value, properly so called. That which has no value cannot be consumed to waste, and wherever there is the fear of wasting there is value.

It is justly observed by Locke, that in a man-of-war silver may not be of equal value to gunpowder. Yet, were the silver and the gunpowder on board, both of them public property, there would be no exchanges, and consequently no exchangeable value. And, in the same sense in which the gunpowder might be more valuable than the silver, we can understand how in a siege or sea voyage water can be valuable, though, being public property, it cannot become the subject of an exchange.

In general, in order to find instances of value existing without exchanges, we have only to exclude the commerce of a plurality

of properties. In every exchange there is a transfer of property. In the case, therefore, of a solitary individual, such as Robinson Crusoe, there can be no exchange, because then there would be nobody with whom to exchange. Again, in a country in which the division of labour is unestablished, and in which each man combines in his own person a variety of employments, and procures and prepares for his family whatever articles they consume, it is plain that barter and sale, and consequently value in exchange, would be unknown. Still these articles would be valuable—the possession of them would be of importance to the person possessing them, though they would not be exchangeable. So likewise in a society having an internal community of goods and no external trade, there could be no exchangeable value, because of the absence of plurality of properties.¹ We may imagine such a society to supply itself more or less plentifully with the luxuries, comforts, and necessaries of life. But these, though not exchangeable, yet should they be produced in a degree insufficient for the full supply of every want, would not be destitute of value.

Adam Smith remarks, that man is the only animal which makes exchanges. "Nobody," he says, "ever saw one dog make a fair and deliberate exchange of one bone for another, with another dog." "Nobody," he continues, "ever saw one animal, by its gestures and natural cries, signify to another, 'This is mine, that yours; I am willing to give you this for that.'" But we may observe, that dogs have a sense of value, though not of exchangeable value. Though nobody has ever seen two dogs making an exchange, yet a dog has been often seen to hide a bone. The dog does this from a sense of its value, properly so called. He does not do it merely from a sense of utility, or, in other words, because he likes a bone, but because he knows that a bone is a good thing which is not always to be had when wanted. In order that two dogs should make an exchange then, besides a sense of value, and besides also other circumstances which I shall hereafter explain, it would be necessary that they should understand and mutually acknowledge the rights of property. But to this degree of civilization dogs have not yet attained. The nearest approach to it that I know of is in Constantinople, where the dogs act the part of scavengers, and, it is said, have their

¹ Colonel Torrens adduces the cases of a country in which the division of labour is unestablished, and of a society having an internal community of goods, as examples of the existence of wealth where value is absent. In strictness, they are cases in which there is no motive for exchanging; and to me they appear equally well fitted to illustrate the separation of the idea of value as of that of wealth from all reference to exchanges.

regular beats, like beggars in London, no individual dog ever presuming to trespass beyond his own territory.

Some few examples of value, in which the idea of an exchange is not concerned, might perhaps be taken from common life. We can well conceive an article made expressly for the use of an individual, and to him actually both useful and valuable, when to every other human being it would be absolutely useless, and when it would, therefore, be altogether destitute of value in exchange. Extreme cases, however, such as this, where the whole of the value is altogether personal, are certainly rare. But cases in which a great part, though not the whole, of the value is lost in the exchange, are frequent. The value, to the person for whom it is made, of a coat made to order, cannot be estimated by what others would give for it. The same may be said of a seal marked with the crest and initials of its owner. Its value to the person to whom it belongs is increased by its being marked. But all this increment of value, and more than this, would be lost in an exchange. The same operation, which renders the commodity of more value in the estimation of its owner, is calculated to render it less valuable in the estimation of all other persons, and therefore of less value in exchange.

Such then is the notion of absolute as distinguished from comparative or exchangeable value. It signifies the real importance of an object to the person who possesses it, and in this sense it is surely easy to be understood, how an object can be said to vary in value without any reference to other objects express or implied. We can understand how, in a time of famine, corn *per se* may be said to be more valuable than in a time of plenty; and how, if labour becomes more effective, so that commodities of all kinds shall be produced in a degree of abundance greater in proportion to the wants of mankind, all sorts of commodities, though exchangeable in the same proportions as before for each other, could be said to have become less valuable.

In this sense of value, it may be remarked that, to a poor man, the same things are more valuable than to a rich man; and this sense, it may be further remarked, agrees with the use of the term in common discourse. The following, for example, is a passage I lately met with in an argument on the inequality of pecuniary punishments.

"No one would be absurd enough to maintain, that a guinea has the same value, and, therefore, would become an equal forfeiture to two persons, the one having a thousand and the other only ten of these."

And a little further on :

"Now the possession of personal liberty is equally dear, equally valuable to all, and the abridgment of it would, therefore, be equally felt by all; and this reflection naturally points to imprisonment as the substitute for punishment by fine."

It may be said, and to a certain degree perhaps with truth, that this notion of value, independent of an exchange, is very vague and undefined. But it is not more so than the idea of utility, which nobody pretends to refer to the mere relation of objects to each other. It would indeed be difficult to discover any accurate test, by which to measure either the absolute utility of a single object, or the exact ratio of the comparative utilities of different objects. Still it does not follow, that the notion of utility has no foundation in the nature of things. It does not follow, that because a thing is incapable of measurement, therefore it has no real existence. The existence of heat was no less undeniable before thermometers were invented, than at present. So neither does it follow, that because the idea of the value of an object, singly considered, is difficult to be grasped, therefore it can have no independent existence. Mr. Malthus asks very pertinently, whether in a country where there is nothing but deer, a deer could be said to be without value, because there would be no other object with which to compare it, when a man would walk fifty miles in order to obtain one.

Two questions, among others, have been agitated respecting value; the one, whether any object can have intrinsic value, the other, whether it can have absolute value. It is of this latter question that I have been treating, and I have been endeavouring to determine it in the affirmative, that is, to show that an object can have value of its own, independently of all comparison with the values of other things. The question about intrinsic value is different from this, though, as both intrinsic and absolute are opposed to relative, the two are apt to be confounded. I have maintained, that an object can have absolute value, but it is impossible to maintain, that it can have intrinsic value in the full sense of the expression. Intrinsic value means value inherent in the object itself, which must necessarily remain the same while the object remains the same, and could be changed only by a change in the internal constitution and nature of the object. Nothing, however, can be called valuable without reference to somebody to whom it is valuable; and, hence, according to the variations in the wants of the individuals to whom we refer, the same commodity, though retaining the same intrinsic qualities, is

variable in value. The term value, therefore, does not express a quality inherent in a commodity. It expresses, as I stated before, a feeling of the mind, and is variable with the variations of the external circumstances which can influence that feeling, without any variation of the intrinsic qualities of the commodity which is the object of it. It is one thing to maintain, that an object may have value independently of all reference to the values of other objects; it is quite another thing to maintain that it can have value in itself, independently of all reference to mankind. And I repeat, that it is the former proposition, and not the latter, that I have been maintaining.

To illustrate the absolute nature of value, I compared it with utility, observing, that the one was as much absolute as the other, and that the objections arising from the indefinite character of absolute value were equally applicable to utility, the idea of which was quite as indefinite and as little capable of mensuration as that of absolute value. To this point of similarity we may add the negative one, that the utility of an object is not intrinsic any more than the value. Utility, like value, is predicated of an object with a reference to the wants of mankind. Blankets are useful in England, but they are not useful, or at least not equally useful, in a hot climate. Ice is useful in summer, useless in winter. Still, the intrinsic qualities of blankets, and the intrinsic qualities of ice, are at all times, and in all places, the same.

Besides explaining the meaning of the term value, I had intended, in this lecture, to have also considered the question of the measure of value, and to have examined the grounds on which sometimes labour, and sometimes corn, have been assumed to be nearly invariable in their real value, and to be on that account fitted for measuring the varying values of other commodities. I find, however, that I shall not to-day have time for entering on these questions; I shall therefore conclude with setting before you once more the doctrine against which I have been contending, together with an illustration of it, which appears to me to be a very unfortunate one, though it has been used several times by the supporters of that doctrine.

"We can understand," they say, "what is meant by the value of cottons; viz. the quantity of other goods for which a given quantity of cotton will exchange. We can understand in what manner cottons may rise or fall in value; viz. when a given quantity of cottons comes to exchange for a greater or less quantity of other commodities than before; but what is meant by the value of the whole produce, or how the whole produce of the land, or labour of

a country, or of the world, can be said to rise or fall in value, is a problem of which we must leave to wiser heads than our own to discover the solution. Value is a relative term : if it is not this, it is nothing : if any one talks about absolute value, or any other kind of value than exchangeable value, we know not what he means."

This is from the *Westminster Review*. Again: M. Say observes, that "the valuation of an object is nothing more or less than the affirmation, that it is in a certain degree of comparative estimation with some other specified object." I quote this from M. Say, because it seems to be referred to in the following passage from an anonymous writer, containing the illustration to which I before alluded.

"All value is relative, as M. Say observes; and as we should more easily bear in mind, if the word 'exchangeable,' or 'in exchange,' which in this sense it always implies, were always uttered and expressed. Now, all motion is relative: for by motion we merely mean, an alteration in the distance or interval between two things. But we have been accustomed, to save time, to use the word motion absolutely. When the distance between a ship and the whole mass of the country from which it set out, is altered, we say absolutely, the ship moves; and if we were asked, whether the country moves too, should generally answer, 'no, it is at rest'; that is, because the ship is small compared to the country. Yet this same country, perhaps, at the same time, alters its distance with regard to the heavenly bodies, and is itself said, when considered in that point of view, to move; the heavenly bodies being now said to remain at rest: but we still mean, that the distance between these bodies and our earth, or that particular part of it, is altered, and that they are more or larger than it. Yet from this way of speaking, from this habit of saying, for shortness, that the ship or the earth moved absolutely, in order to express that a relative motion or change of distance took place between them and some other things, philosophers long maintained that motion was inherent, and that if there were but one thing in the universe, it might yet move: that the earth, for instance, might be said to move absolutely, though the heavenly bodies were annihilated; and if they were reminded that motion was relative, they would then assert, that the earth in such case would move relatively to the parts of space; that is, by the very definition of space, relatively to nothing at all. 'There is nothing,' as Mr. Malthus observes in the *Essay on Population* 'which has given occasion to such a host of errors as the confusion between relative and positive.'"

Now all this appears to me to be a blunder arising from confounding the evidence of a fact with the fact itself. Value, it is here said, is no more absolute than motion is absolute. But I maintain that some motion *is* absolute. I deny that, by motion, we merely mean an alteration in the relative position of two things. I maintain, that it is true what philosophers long ago maintained, that if there were but one body in the universe, it might yet move; and that the earth might be said to move absolutely, though the heavenly bodies were annihilated. The only difficulty would relate to the evidence of the fact. Yet, under certain circumstances, the proof would not be desperate. When we observe the daily change in the relative positions of the sun and earth, we know at once that one of them has moved. But there still remains the difficulty of determining which of the two it is that has moved. We solve this difficulty, and ascertain that the earth has actually revolved on its axis, by the phenomena of the centrifugal force; and though, in the absence of the sun and the heavenly bodies, it would probably never occur to us to inquire respecting the earth's motion, yet, if we should take it into our heads to inquire about it, the same resource would remain to us. Then, as now, we should account for the diminution of gravity as we pass from the pole to the equator, by the supposition of a centrifugal force opposed to gravity, and arising from rotation. We should thus ascertain the absolute motion of the earth, notwithstanding the absence of any other body to which it could be referred.

As it is not true that all motion is relative, so, I must maintain, it is not true that all value is relative.

THE GENERAL STRIKE DURING ONE HUNDRED YEARS

THE term "general strike" seems to have no tolerably definite meaning. It has been used to describe strikes varying in magnitude, from the sympathetic strike affecting only a limited area, to a great strike on a national scale like the general strike of 1926. The words "general strike" are used by Mr. and Mrs. Webb in connection with the London tailors' strike in 1834, "in which 20,000 persons are said to have been thrown out of work";¹ and again in referring to the Lancashire cotton operatives' "abortive general strike for an eight-hour day."² M. Halévy, in his recent *History of the English People*, 1815-30, remarks that in July 1818 the Lancashire spinners came out on strike, and in August the weavers joined them. "Even the miners prepared to throw in their lot with the strikers. Lancashire appeared on the verge of a general strike."³ The same writer uses the words in a similar sense to describe the stoppage in Glasgow and neighbouring towns that followed the workers' proclamation of April 1, 1820.⁴ This proclamation is interesting, since it reveals the existence of an ambitious plan; it urged a general cessation of work in England, Scotland and Ireland until a political revolution had been accomplished. In short, the issuers of the proclamation aimed at a political general strike of the most extensive type. The most important paragraph ran as follows:

"Address to the Inhabitants of Great Britain and Ireland.
... In the present state of affairs, and during the continuation of so momentous a struggle, we earnestly request of all to desist from their labour from and after this day, the First of April; and attend wholly to the recovery of their Rights, and consider it as the duty of every man not to recommence until he is in possession of those Rights which distinguish

¹ *Hist. of Trade Unionism* (1907), p. 134.

² *Ibid.*, p. 143. According to Beer (*History of British Socialism*, Vol. I, p. 318), the term first appeared in the *Herald of Rights of Industry*, April 5, 1834. John Doherty was the editor.

³ Halévy, *Hist. of the English People*, p. 56.

⁴ *Ibid.*, p. 82.

the Freeman from the Slave; viz. That of giving consent to the laws by which he is governed. . . .

“By order of the Committee of Organisation,
for forming a Provisional Government.

“*Glasgow, 1st April, 1820.*”

The weavers of Glasgow and Paisley struck work on April 1, 1820; the colliers of the neighbourhood followed on April 3, and were joined by the cotton-spinners, machine-makers and founders.¹ But the stoppage did not become more general than this.

In spite of repeated failures, the idea of simultaneous collective action by the working people on a large scale has never been entirely abandoned, and at times—with aims sometimes political, and sometimes economic—it has been very much to the fore. The first proposal on record for the organisation of workmen into one general union was put forward by John Gast, a Deptford shipwright, and an able and energetic trade unionist.² Gast helped to found a society called the “Philanthropic Hercules.” Its primary object seems to have been the creation of a strike and petitioning fund, by subscriptions of one penny per week per member. It was intended to be a central union of all trades, and trades that joined obtained the right to send delegates to its general committee. But apparently it did not survive very long.³

Another reference to a general union of different trades appears in William Cobbett’s *Political Register* in 1825. Cobbett maintained that the unions of workmen then springing up were the outcome of high commodity prices; the “main body of persons (he says) engaged in these combinations know little about the *cause* of those *high prices* which cause them to combine. . . . They combine to effect a rise of wages. The masters combine against them. . . . The different trades combine, and call their combination a *general union*.”⁴ Again, in the early ’thirties, we find the Trades Union (*i.e.* a combination of the workers in different trades) much under discussion; the ideal was complete solidarity of all wage-earners in a single “universal” organisation.⁵ This development evoked, of course, a great deal of hostile criticism, and, in 1834, William Lovett addressed an

¹ Cobbett’s *Political Register*, April 15, 1820, pp. 360–2.

² Add. MSS. 27,819 (23): also Webb, *op. cit.*, p. 76 n.

³ *The Gorgon*, December 5, 1818, and January 23, 1819.

⁴ *Pol. Reg.*, August 27, 1825, p. 519.

⁵ Cf. Webb, *op. cit.*, p. 103.

open letter to the editor of the *True Sun*, in defence of the new Trades Unions. He pointed out that the Trades Unions were intended to take the place of the old trade societies. Low wages had forced the workmen to adopt the plan in the hope that unity among a number of societies would afford a "greater means to accomplish their object." Thus, said Lovett, the Operative Builders had formed "a union of all branches in the building line," and subsequently the Consolidated Union had been formed; all with the same objects. Some of the trade societies, however, had held aloof.¹

Probably the most active spirit in promoting the project of a great general union of trades throughout the United Kingdom (the aims of which were to be economic, not political) was John Doherty, the secretary (in 1829) of the Manchester Cotton-spinners' Union. In February 1830, the delegates of twenty trades held a meeting in Manchester, which resulted in the formation of the National Association for the Protection of Labour, with Doherty as general secretary. The membership of the new association was mainly drawn from the textile trades, and its object was to resist reductions of wages, but not to organise strikes for advances.² In the winter of 1830-31, when the cotton-spinners of Ashton-under-Lyne were on strike, and in the spring of 1831, fresh accessions of strength came to the National Association. The Belfast trades, the Potters' Union, and some 9,000 miners of Staffordshire, Yorkshire and Cheshire, all became affiliated. But lack of funds soon reduced the National Association to impotence.

At the beginning of 1832 a plan for a general strike on a national scale as an instrument of political reform was set forth by William Benbow in a pamphlet entitled *A Grand National Holiday and Congress of the Productive Classes*. The author of this piece of propaganda was born about 1780,³ and was originally a Manchester cobbler. He had lived the exciting and precarious life of an agitator through the troublous times of the Hampden Clubs, the Six Acts, and the "Peterloo massacre" of 1819.⁴ He had become a hardened revolutionary and an advocate of physical force. According to Henry Hunt, Benbow had been denounced by a Government spy, in 1816, for making pikes in readiness for a

¹ *Poor Man's Guardian*, August 30, 1834.

² Webb, *op. cit.*, pp. 106-7.

³ *Northern Star*, April 25, 1840. The *Hull Packet* of August 16, 1839, guessed Benbow's age as "about 46" at that date, but the evidence clearly indicates that this is an under-estimate.

⁴ Beer, *Hist. of British Socialism*, Vol. I, pp. 314-5.

projected insurrection.¹ Evidently Benbow had been in conflict with the authorities about that date. He was imprisoned in 1817 during the suspension of the Habeas Corpus Act, and released at the beginning of 1818. Early in 1819 a passing reference was made in the *Gorgon* to the popular victories "of late" in the Courts of Justice, such as the acquittal of Wooler and Hone, the disclosure of the "infernal machinations" of Oliver, a Government spy, and "the complete vindication of the characters of such men as Ward, Benbow, Knight, the Evanses," and others.² About this time Benbow went into the publishing trade, and, in June 1820, he became the publisher of Cobbett's famous *Political Register*. Ten years later we find him in London keeping a coffee-house, and helping to lead the left wing of the working-class movement. He was prosecuted, in 1832, together with Lovett and Watson, for organising a procession on March 21st; a day on which the Government had ordered a fast as a means of averting the cholera epidemic.³ During the years 1836-38, Benbow was active in the Anti-Poor Law agitation, and in the cause of Chartism; and in 1839, after travelling all over Lancashire preaching the general strike, and hinting broadly at armed insurrection, he was arrested in the great "round-up" of Chartist leaders.⁴

This, then, was the man who advocated a "grand national holiday" or "sacred month." All productive activity was to cease for a month, and the strikers were to be the makers of a political revolution, peaceably if they could; forcibly if they must.

In 1831, when Benbow began actively to urge this plan upon the working classes, he was the proprietor of the "Commercial Coffee House" at 205 Fleet Street, near Temple Bar. He was also a member of the National Union of the Working Classes; he frequently took part in the weekly debates of that society, in company with John Cleave, Henry Hetherington, John Gast and other zealous and advanced Radicals (usually called the Rotund-anists), and occasionally he was called to the chair.⁵ Francis Place says of the Rotundanists:

¹ H. Hunt, *Memoirs* (London, 1820-2), Vol. III, quoted by Hovell, *The Chartist Movement*, p. 91.

² *The Gorgon*, January 23, 1819, p. 283; cf. *State Trials*, 1820, p. 182 n, and Huish, *Life of Henry Hunt*, Vol. II, p. 122.

³ Brit. Mus. Add. MSS. 27,791 (255, 392), and 27,822 (26); also Pamphlet on *The Trial of Benbow, Lovett and Watson*, published by J. Watson (1833); and *Poor Man's Guardian*, March 24, 1832.

⁴ *Northern Liberator*, August 17, 1839.

⁵ *Poor Man's Guardian*, June 18, August 20, and October 29, 1831.

“They denounced everyone who dissented from these notions¹ as a *political economist*, under which appellation was included the notion of a bitter foe to the working classes, enemies who deserve no mercy at their hands. Most of these men were loud and long talkers, vehement, resolute, reckless rascals.”²

But this judgment is, in my opinion, too severe. It is tolerably clear that Benbow, who *was* an extremist, soon became a thorn in the flesh of the majority of the members of the National Union of the Working Classes. One instance is recorded by Lovett. It was proposed to hold a “grand meeting” on the question of parliamentary reform, in front of White Conduit House, on November 7, 1831; but the project was abandoned partly because of the Bristol riots and the excited state of the public mind, and partly because of “some very improper language used by Benbow at a meeting in the Rotunda . . . which language, however, was strongly deprecated by the Committee and members generally.”³

At another meeting on September 28, 1831, a resolution in favour of universal suffrage, annual parliaments and vote by ballot was under discussion, and William Benbow, seconding the resolution, called attention to his “bantling,” or as others would call it “a spoiled child of his own rearing.” He wished again to impress on the minds of the working classes the necessity of a holiday for a month. He had, he said, a peculiar wish for a festival of that kind, and that it should emanate from a grand and solemn national conference. He assured the meeting that if the working classes would cease from their labours for one short month, such a lesson would be instilled into the heads of their taskmasters as would teach them to sing another song.⁴ Three weeks later, Benbow again recommended his project to the working classes; he said that “he would tell them how easily they could humble their taskmasters without resort to anarchy, confusion, revolution or blood.”⁵ The last clause does not sound like Benbow, and it may be that he put it in in order not to alienate the moral force section of his audience. He contended that alliances with shopkeepers and the middle classes would not

¹ *I.e.* that everything which was produced belonged to those who by their labour produced it.

² Additional MSS. 27,791 (48), quoted in Wallas, *Life of Place*, p. 273.

³ Add. MSS. 27,822 (24).

⁴ *Poor Man's Guardian*, October 1, 1831.

⁵ *Ibid.*, October 22, 1831.

forward the cause of the workers, but the national holiday would work such a transformation that afterwards the working classes would "all live well, and have three clean shirts a week (tremendous cheering)." ¹

As the excitement generated by the Reform Bill agitation became more intense, the discussions of the National Union of the Working Classes became less pacific. Towards the end of November 1831, they were discussing arms and Colonel Macerone's pamphlet on street warfare.² A kind of military organisation was adopted, and Benbow, who had become a "class leader," called upon all the old soldiers to go to their classes and teach their brethren military evolutions.³ At the same time he continued to advocate the general strike and the organisation of the working classes in one "grand union." The Committee of the National Union of the Working Classes succeeded in persuading him to defer the publication of his plan for the national holiday,⁴ but he made it clear that it was merely postponement, not abandonment, to which he had consented.⁵ At a meeting on December 12, 1831, Benbow said that it was better to be idle than to work and starve. The men of the North had some notion of his holiday; but they must await the appointed time. All must act together. Let the holiday be unanimous and general, and in one month the people would obtain their rights.⁶

In the *Poor Man's Guardian* for January 14, 1832, the following notice appeared :

"This Day is Published, price 2d.

BENBOW'S

Grand National Holiday,

During which a 'CONGRESS' of the WORKING CLASSES will be held to put into execution a plan, which is to obtain *effectually* and *permanently* the rights and liberties of the People. The PAMPHLET developing this great plan—so

¹ *Poor Man's Guardian*, November 5, 1831.

² Extracts from Macerone's book, with illustrations of workmen armed with pikes resisting cavalry and infantry, were published in the *Poor Man's Guardian* on April 11, 1831. Alexander Somerville replied to Macerone in *Warnings to the People on Street Warfare*. Cf. Add. MSS. 27,821 (85); also *Weekly True Sun*, April 14, 1839.

³ *Poor Man's Guardian*, November 26, 1831.

⁴ *Ibid.*, December 3, 1831.

⁵ *Ibid.*, December 10, 1831.

⁶ *Ibid.*, December 17, 1831.

easy of execution, and so sure of complete success—will be published on Saturday the 14th of January.

“Published by W. Benbow; sold by Watson, 33, Windmill Street, and all Booksellers.”

“Plundered fellow-sufferers,” said Benbow in his pamphlet, “I lay before you a plan of freedom. Adopt it and you rid the world of inequality, misery and crime. A martyr in your cause, I am become the prophet of your salvation.” He opens with a wholesale denunciation of the privileged few who live in the luxury produced by the despised travail of the miserable masses; the drudges of society. What working man, he asks, can say that he lives? His existence is a mere negative. “He is alive to production, misery and slavery—dead to enjoyment and happiness . . . if they are the source of all wealth—that wealth is not for them.”¹ All the misery of the many may be traced to their ignorance, not of book-learning, but of their own power. By unity of thought and action the working classes could remove mountains of injustice, oppression, misery and want. But they must rely entirely upon themselves; to expect aid from other political parties would be “sheer madness,” for they have no feelings in common with the suffering working classes.² The latter must have a month’s holiday in order “to establish plenty, to abolish want, to render all men equal . . . the constitution drawn up during our holiday shall place every human being on the same footing. Equal rights, equal liberties, equal enjoyments, equal toil, equal respect, equal share of production. . . .” The proposed general strike was to last one calendar month and to extend throughout the whole of the United Kingdom. During the month a congress was to be held to “concert a plan whereby, if it is possible, the privation, wretchedness and slavery of the great mass of us may be diminished, if not completely annihilated.”³ The whole of the productive classes were to be organised and controlled by local committees throughout the country, and from each parish and district these committees were to select representatives to be sent to the national congress. A population of 8000 “shall send two wise and cunning men”; a population of 15,000—four; a population of 25,000—eight. London was to have fifty representatives.

But universal preparations must be made. The general strike ought to take place neither in seed-time nor in harvest-

¹ Benbow, *Grand National Holiday*, p. 4.

² *Ibid.*, pp. 7-8.

³ *Ibid.*, p. 10.

time, but in the summer. The strikers must provide food for the first week, after which the sovereign people acting by means of their local committees would requisition whatever supplies they needed. " 'The cattle upon a thousand hills are the Lord's.' When the people's voice, which Lord Brougham proclaims to be the voice of God . . . demands the cattle of the thousand hills, who dares withhold the cattle? . . . During our holiday the people may have need of this cattle: let them order it to the slaughter-house, and their herdsmen and drovers will obey them."

The author admits that the plan is not "detailed and matured," and he invites suggestions from others. He contends that the working classes have, in the past, been too honest, too conscientious, too delicate; with the result that they had been duped by the few. But the time to throw off squeamishness had come. Let the workers boldly lay hands upon that which was their own.

In the following year, Robert Owen outlined his scheme for a general union of all trades,¹ and the Grand National Consolidated Trades Union was formed at the beginning of 1834, as the first step towards "the great changes which are in contemplation and which shall come suddenly upon Society, like a thief in the night. . . ."² Mr. and Mrs. Webb have expressed the opinion that "Nothing in the annals of Unionism in this country at all approached the rapidity of the growth which ensued. . . . The avowed policy of the federation was to inaugurate a general strike of all wage-earners throughout the country."³

These developments were not lost upon the Government of the day, and, wishing to suppress combinations of working men, it discovered a forgotten, but convenient, old Act of George III which made it a penal offence to administer illegal oaths. This weapon was used, as is well known, against the six Dorchester labourers, who were sentenced to seven years' transportation. The Trade Unions united in a common protest, and the Grand National Consolidated Trades Union organised a great procession which, but for the energetic counter-measures of the Government, and the inexperience of the unions, might easily have developed into a general strike.

Although the Grand National Trades Union failed to hold together beneath the blows of the employers and the law,⁴ the

¹ *The Crisis*, October 12, 1833.

² Podmore, *Robert Owen*, p. 445.

³ Webb, *op. cit.*, pp. 120-2.

⁴ See Rosenblatt, *The Chartist Movement*, p. 80.

idea of the general strike persisted. The severe trade depression of 1836-39 crippled the Trade Unions, but produced Chartism; and the general strike as a political weapon again came under discussion. In the Chartist National Convention, on February 11, 1839, Feargus O'Connor told the delegates that all the courtesy in the world would not impress members of Parliament: the best way to make an impression on them was to go with the Petition in one hand and ulterior measures (which included the general strike) in the other. But James Bronterre O'Brien differed. He thought that courtesy was the best policy, for "no set of men like to be bullied."¹

The general strike was discussed by the Chartist leaders as one among five or six methods—such as refusal to pay taxes, and a run on the savings banks—of bringing pressure to bear upon the Government if (as seemed highly probable) the petition to Parliament² embodying the famous six points should be rejected. On April 22, 1839, O'Connor made a speech suggesting that the general strike might prove a useful and important weapon in the campaign. The workers, he said, could "meet the cannon with the shuttle." But no definite action was decided upon at that time.³ Little more than a week later, ulterior measures were again mentioned in connection with the proposal that the Convention should move away from London. On May 1, O'Connor proposed that the sittings should be held in Birmingham on and after May 13. Replying to a question put by O'Brien, O'Connor said that he hoped never to see the Convention sitting again in London, once it had left for Birmingham.⁴ There was a great deal of discussion. In the end O'Brien submitted the following motion:

"That until the people's demands of the National Petition, and the People's Charter shall have been submitted, and decided upon by the Legislature respecting our demands, it is the duty of the Convention to continue its sittings in London, but in the event of the Legislature rejecting our demands, this Convention is of opinion that its sittings ought forthwith to be removed to Birmingham or Manchester, and that we do hereby resolve that we will make Birmingham or Manchester the scene wherein we will make the discussion of ulterior measures."

¹ Add. MSS. 27,821 (31).

² Described by Francis Place as "that piece of absurdity." See Place Collection B.M. Hendon, vol. 56, 1836-38, Intro.

³ *The Charter*, April 28, 1839.

⁴ Add. MSS. 27,821 (102).

Hetherington suggested that the reference to ulterior measures should be omitted, and to this O'Brien agreed. The amended motion was then carried by 20 votes against 17.¹

Clearly, opinions among the members of the Convention were much divided; but gradually, as the deliberations dragged on, the idea of a general strike gained somewhat in popularity, while the idea of an appeal to arms fell into the background.² But there can be little doubt that the more revolutionary members—the physical force men—regarded the general strike merely as one way of commencing a rising.³ Many of the moderates, on the other hand, were not enamoured of the project at all: they thought that there would not be a sufficient response to a general strike call. William Lovett, the secretary of the Convention, urged that the strike ought to be delayed pending the collection of a proper strike fund.

Disraeli's well-known novel *Sybil* (1845) gives us an interesting and, I believe, substantially accurate picture of the part which some of the Chartists hoped to make the general strike play in their campaign for political reform. Says a Chartist leader in *Sybil*:

"There are to be no leaders this time, at least no visible ones. The people will do it themselves. All the children of Labour are to rise on the same day, and to toil no more, till they have their rights. No violence, no bloodshed; but toil halts, and then our oppressors will learn the great economical truth as well as moral lesson, that when Toil plays, Wealth ceases. . . . The Benefit Societies, the Sick and Burial Clubs, have money in the banks which would maintain the whole working classes, with aid in kind that will come, for six weeks, and that will do the business. And as for force, why there are not five soldiers to each town in the kingdom. It's a glittering bugbear, this fear of the military; simultaneous strikes would baffle all the armies in Europe."⁴

Upon the day after their arrival in Birmingham, the members of the Convention began to discuss the issue of a manifesto, and a plan to hold numerous public meetings at Whitsuntide 1839, at all of which a list of questions chiefly relating to ulterior measures were to be submitted. Once again great differences of opinion arose. Lovett was in favour of a manifesto because it was the most straightforward line of action. John Cleave, Halley and

¹ Add. MSS. 27,821 (103).

² *The Charter*, May 19, 1839.

³ See Gammage, *Hist. of the Chartist Movement* (1894), p. 127.

⁴ *Ibid* Book VI. chap. v.

others were definitely opposed to it. O'Brien did not favour its adoption at that moment. He said that, generally speaking, he agreed with every article recommending ulterior measures, but he was afraid that a refusal to pay rents and taxes would give the Government an excuse for interfering that would prove fatal to the Chartist cause. They might even become liable to a charge of conspiracy. Therefore he suggested that 10,000 copies be printed and circulated in Great Britain in order to take the sense of the country on the matter before the Convention officially adopted the manifesto as its own.¹

In the end the manifesto was passed. The Chartist leaders now seemed disposed to rely mainly upon their chief economic weapons, which included the general strike. The Whitsuntide meetings were to be asked (*inter alia*) :

“ whether, if the Convention shall determine that a sacred month will be necessary to prepare the millions to secure the Charter of their political salvation, they (the Chartists) will firmly resolve to abstain from their labours during that period, as well as from the use of intoxicating drinks ? ”

The weakness of this proposal lay, of course, in the fact—which many of the Chartist leaders could not, or would not, grasp—that the rank and file of the Chartists up and down the country were not a majority of the working classes. A significant entry in the private journal of Sir Charles Napier clearly indicates that large meetings even in 1839 did not necessarily mean a large following. General Sir Charles Napier was at that time in command of the Northern District, and his sympathies were strongly with the working classes in their desire for political reform and economic betterment.² He wrote :

“ April 22nd.—Went to a meeting. . . . There were nearly three thousand people, most of them spectators taking no interest in the proceedings; no cheer followed the orator's expressions, it was like a religious meeting. Was this deep attention or not? In my mind not, for numbers came and went the whole time, and plenty of a Chartist description walked about wholly inattentive to the speakers. Feargus O'Connor and Bronterre O'Brien were advertised to be the orators, but did not come.”³

¹ *Birmingham Journal*, May 18, 1839.

² Cf. Bruce, *Life of Sir Charles Napier*, chap. iv.

³ Sir W. Napier, *Life of Sir Charles Napier*, Vol. II. p. 11.

Lovett tells us that during the Whitsuntide recess the minds of the more prudent members of the Convention were disturbed by the question of the proper course to take when the Convention reassembled at Birmingham. "For though many of them (says Lovett) had advocated the possession of arms, as an ancient and constitutional right, and as a means for securing protection and respect, they were far from advising the public exhibition or use of them. Still less were they agreed upon the propriety of a general suspension of labour for a month, although they were not adverse to the discussion of the subject as a threat to our adversaries." In Lovett's opinion it would have been better if the Convention had dropped entirely the discussion of the general strike. He also had in his mind a plan to test the country by fixing a day "for one or two trades to cease from labour," and calling upon the remainder of the workers in the country to raise a fund to support the strikers. Lovett argued that if the persons not on strike would not contribute to the fund, they certainly would not strike in a body at the command of the Convention. I believe that Lovett felt fairly certain that the fund would be a failure, and hoped, in this way, to dispose finally of the general strike project.¹ If he did, his hopes were not realised.

On July 3, 1839, the left-wing members of the Convention reopened the question of ulterior measures, and urged early action on the ground that the meetings of the past six weeks had demonstrated that their followers were ready.² By this time, however, the general strike had waned somewhat in popularity among the Chartist leaders as a whole, and there was much irresolution. The discussion dragged on in the Convention until July 12, when it finally published a manifesto in favour of ulterior measures, but with the sacred month in very small type at the bottom of the list. It so happened that on the same day the Chartists' first great Petition was rejected in the House of Commons by 235 votes against 46.³

In view of this rebuff, and their previous parade of ulterior measures, the Chartist leaders felt that they *must* do something, and, on July 15, 1839, they commenced to discuss the general strike again. After two days' discussion, during which many members (including Feargus O'Connor and James O'Brien) were absent, the Convention decided by 13 votes to 6 to commence a general strike on August 12, 1839. But the moment chosen was

¹ Lovett, *Life and Struggles* (Bohn's Ed., 1920), Vol. I. pp. 220-1.

² Add. MSS. 27,821 (283 and 292).

³ Hansard, 3rd Series, Vol. XLIX. pp. 220 *et seq.*

most unsuitable. Trade was severely depressed; the adherence of the trade unions was extremely doubtful, for the Trade Union Movement was not the Chartist Movement, and many trade unionists were not Chartists; and no plans or preparations of any kind had previously been worked out. Moreover, having made the momentous decision, those who had voted for it began to lose their nerve, and many of those who had not been present to vote became either critics or prophets of woe. James O'Brien, who had all along been an advocate of physical force and revolution, told the Convention on July 22, 1839, that while he adhered to his belief that the general strike was an ideal political weapon, the Convention was not competent to wield it. Neither in the Convention nor in the country was there unanimity upon the wisdom of calling the general strike. Therefore failure was certain; and in any case the decision ought to be left to the people, who, after all, were the best judges of their ability to withstand the exigencies of a strike. As a result of this speech the Convention appointed a committee to take the sense of the people, which really meant the abandonment of the general strike policy.

The actual resolution, which was submitted by O'Brien, and carried by 12 votes against 6 (7 abstentions), was worded as follows :

" That while the Convention continues to be unanimously of the opinion that nothing short of a general strike, or suspension of labour throughout the country, will ever suffice to re-establish the rights and liberties of the industrious classes, we nevertheless cannot take upon ourselves the responsibility of dictating the time or circumstances of such strike. . . ." ¹

The chief reasons assigned for this decision were :

1. The diminished numbers of the Convention, owing to " desertions and arbitrary arrests." ²
2. Diversity of opinion both within the Convention and outside.
3. The great privation and suffering to which a strike that was only partially complete would lead.
4. The people themselves are the only fit judges of their " right and readiness to strike work."

¹ Gammage, *History of the Chartist Movement* (1897), p. 146.

² The Convention was, by this time, left with little more than one-quarter of its original strength.

The *Northern Star* of July 27, 1839, announced that on July 25, "after six days' excited discussion, the following resolution, unanimously adopted by the Amalgamated Committees," was also unanimously adopted by the full Convention :

"Resolved—That the Convention, having previously appointed the 12th of August as the day for the general cessation from labour, it becomes necessary to appoint a council, which shall sit in London, and whose duty it shall be to receive evidence from those delegates, who shall forthwith return to their respective constituencies, and also from the country at large, with a view of taking the most effectual means of giving effect to such plan as the majority of the working classes shall decide upon."

A council of seven was then appointed, viz. O'Connor, O'Brien, Fletcher, Carpenter, Lowery, Smart and Burns.¹ A notice appeared in the *Northern Star* on July 27, calling upon every body of working men in the kingdom to address the Convention as to their desire, means and power of carrying out a general strike. They were exhorted to speak out at once, not allowing their enthusiasm to influence their judgment.

The communications that began to flow in from the provinces to the committee raised innumerable difficulties, and showed quite clearly that the general strike, if it had been declared, would have been a complete failure. Nobody who reads the letters preserved at the British Museum² can come to any other conclusion. Moreover, the newspaper reports of meetings tell the same tale.³ For instance, early in August 1839, a meeting to discuss the proposed general strike was held at Rochdale. John Taylor, one of the members of the National Convention, was in the chair. There were between 5000 and 8000 working people present, and, according to the report in the *Northern Star*, they were most attentive when the sacred month was mentioned. But they were by no means united. John Deegan, the chief speaker, recommended that the general strike should be commenced on August 12, and a journeyman tailor from Heywood declared that all was ready in his town; but another speaker thought that the men of Rochdale were *not* ready, and the chairman concurred in this opinion. Finally, a resolution was passed to the effect that if other towns commenced the general strike on

¹ *Northern Star*, July 27, 1839. Gammage says that there were five members.

² Add. MSS. 34,245 B (38, 110, 119, etc.).

³ Cf. also Gammage, *op. cit.*, pp. 145-8.

August 12, the men of Rochdale would join in, but they would not be the leaders in the affair. After the meeting, Deegan was arrested.¹

In his Journal, under date July 25, 1839, Sir Charles Napier wrote :

“The Chartists say they will keep the *sacred month*. Egregious folly ! they will do no such thing ; the poor cannot do it, they must plunder, and then they will be hanged by hundreds : they will split upon it, but if mad enough to attempt it they are lost.”²

Again, on August 2, the following entry occurs :

“Sacred month ! Do they imagine they can make the people of England stop work for a month ? . . . It is a farce, but the attempt may produce a tragedy, and to prevent that is in some degree my affair.”

The situation on the eve of August 12, Napier describes as “all on tiptoe ! Everyone expects a row,” but he adds, “not yet, the pear is not ripe.”

On August 6, 1839, the council of Chartist leaders published a resolution stating that they were unanimously of the opinion that a general strike was impracticable. Instead, they urged “the trades of Great Britain” to co-operate “as united bodies with their more distressed brethren” in making a grand national moral demonstration on August 12.³

Meanwhile Benbow was not idle. His *Grand National Holiday* was still on sale,⁴ and its author was still busy urging the people of the North to put his plan into operation. His activities, however, were cut short by his arrest on August 9, 1839, at his house at 27 Lower Mosley Street, Manchester, on a charge of using seditious language at a meeting a month or two before.⁵ Benbow was kept in prison until the Cheshire Spring Assizes in April 1840. When he was at last tried, on April 10, 1840, the case against him was that at Stockport on Sunday, June 9, 1839, he had used inflammatory language and had incited the Queen’s subjects to take arms. Joseph Sadler, Superintendent of the Stockport police, was called as a witness, and said that he had attended the meeting in question. There were about 500 persons

¹ *Northern Star*, August 17, 1839.

² Sir W. Napier, *op. cit.*, Vol. II. p. 63.

³ Gammage, *op. cit.*, pp. 154–5.

⁴ *Northern Star*, May 25, 1839.

⁵ *Manchester Times*, August 10, 1839.

present, and Benbow, and a companion called Mitchell, made speeches from a cart. Benbow told the crowd that they had done nothing for themselves, and that it was not until the people resolved to fight their own battle that the rapacity of the landlords, and the bishops' tithe proctors, would disappear. According to the witness, Benbow then began to make reference to a pamphlet that he had in his hand. He advised every man "to get a sharp pike, about six inches long, and carry it in his side pocket, to defend himself against any of his oppressors that attempted to interfere with him." He also advised a complete cessation of work for a month, and continued to read passages from his pamphlet (which was undoubtedly the *Grand National Holiday*), applying them to persons living in the locality. After the first week of the national holiday, said Benbow, let 50 of them go to Major Marsland and ask for a load of corn, and if he refused, let 500, 1000, 10,000, or even 50,000 go, and then they would get it.

Another witness, R. Beswick of the Manchester Police, stated that when he apprehended Benbow he asked him if he was the author of a pamphlet entitled *A Grand National Holiday of the Productive Classes*, and the defendant had answered "Yes."

At this point Benbow asked the Judge if he thought that there was a case to go to the jury; the Judge answered in the affirmative and the case proceeded. Benbow spoke for about ten and a half hours in his own defence, and must have wearied the Judge and jury beyond measure. He read long passages from a brief that he had before him, and sought to vindicate the principles to which he held. The Attorney-General made a brief reply, and the Judge, addressing the jury, deprecated Benbow's observations, most of which, he said, were beside the point and somewhat aggravatory of the charge.¹ The jury found Benbow guilty and the Judge passed sentence of sixteen months' imprisonment.²

The *Northern Star* printed Benbow's "long but able speech, in defence of himself and his principles," and added that it manifested throughout that spirit of uncompromising dignity which ought always to accompany the right.³

The imprisonment of most of the Chartist leaders during 1840 administered a temporary check to the movement. But the economic causes of Chartism remained, and a revival soon followed the release of O'Connor, O'Brien and other leaders. After the

¹ *Northern Star*, April 18, 1840.

² *Manchester Times*, April 18, 1840.

³ *Northern Star*, April 25, 1840.

failure of the second Chartist Petition in 1842, an attempt was made to take advantage of an outbreak of strikes in Lancashire and district, in order to bring about a cessation of labour throughout the country.¹ The strike movement—originally a protest against wage reductions—spread from Lancashire, where Thomas Cooper tells us that “a wild general strike” was in progress,² northward to Glasgow and the Tyneside, and down through Staffordshire and the Midlands. A delegate meeting of the Lancashire and Yorkshire trade clubs decided to urge all workers to cease work until the Charter became the law of the land.³ In the course of a week, says Thomas Cooper, who was one of the Chartist leaders on the spot, similar resolutions had been passed in all the great towns of Lancashire; “tens of thousands had held up their hands in favour.”⁴ A conference of Chartists gathered at Manchester on August 17, 1842, and resolved upon the same policy. There were nearly sixty delegates present, and they all wished to keep the people from returning to work, for they “believed the time had come for trying, successfully, to paralyse the Government.”⁵ Cooper was in favour of a strike on a national scale, although he felt certain that it would lead to fighting. M'Douall drew up a “fiercely worded” address to the working men, urging a “universal strike.” There was a little opposition. William Hill, editor of the *Northern Star*, opposed the strike altogether; in his opinion it was foolish and a great mistake; but only five delegates voted with Hill against the strike policy. Feargus O'Connor voted in favour of the extension of the strike, but did not really intend to do anything to further the project.⁶

Although the strike movement in the autumn of 1842 was widespread, it did not become “general” in the modern connotation of that term. That is to say, it did not spread all over the country and cause a suspension of the essential services. Work was resumed in some districts at the moment when workers in other areas were about to go out on strike. The *Northern Star* urged the absolute necessity of organisation on a national scale, and declared against the strike movement then in progress because of the absence of the “element of nationality,”⁷ arguing that a general cessation of labour in “any given district,” if

¹ Cf. Dolléans, *Le Chartisme*, Vol. II. pp. 210–25; and Hovell, *The Chartist Movement*, p. 260.

² *Life of Thos. Cooper*, by himself, pp. 190–1.

³ *Northern Star*, August 20, 1842.

⁴ Cooper, *op. cit.*, p. 191.

⁵ *Ibid.*, p. 208.

⁶ Cooper, *op. cit.*, pp. 209–11.

⁷ *Northern Star*, August 27, 1842.

kept up for a long period, must lead not only to shortage of food among the strikers and their families, but to attempts to obtain food by means that would result in a clash with the authorities. The latter would then suppress the movement by force. But "an universal strike would be free from these risks; for its very appearance would at once paralyse the arm of power and sicken the heart of faction. . . . Dearly, therefore, as we would love to see the millions with one shout throw down their tools, and fold up their arms, while faction stood, as she would then stand, amazed, dismayed and powerless, yet we fear that this will not now be the case." ¹

There was another important reason why the strikes of 1842 did not develop into a general or "universal" strike. The members of the Trade Unions were, as a body, by no means convinced of the wisdom of becoming involved in a political movement. How long it would take to bring about the political changes outlined in the Charter no one could say; men and women were already starving, and it was, after all, not *certain* that any great improvement would follow the triumph of Chartism. Moreover, a great many trade unionists were definitely and strongly opposed to any merger of the Trade Union movement with Chartism. A case in point is quoted by Mr. and Mrs. Webb :

"When Chartist meetings at Sheffield were calling for a 'general strike' to obtain the Charter, the secretaries of seven local Unions wrote to the newspapers explaining that their trades had nothing to do with the meetings or the resolutions." ²

The final decline of Chartism, and the growth in the strength of the Trade Unions, accentuated this non-political tendency. It is true that during the manhood suffrage agitation of 1866-7 the ghost of ulterior measures began to walk. George Potter and William Randal Cremer, both labour leaders, talked of a general strike if Parliament refused to give the vote to working men; and Edmond Beales, a well-known Liberal, hinted at non-payment of taxes. But it was, as Mr. C. F. Brand has said, like 1832 over again (except that the results were better for the working men). People were excited; feeling ran high; no such popular upheaval had been known in England since 1839.³ But it is

¹ *Northern Star*, August 13 and 20, 1842.

² *Hist. of Trade Unionism* (1907), p. 159; cf. *The Times*, August 15, 1842.

³ *The Commonwealth*, October 26, November 24, and December 25, 1866, April 27 and May 4, 1867.

more than doubtful whether any attempt would have been made to carry the threat of a general strike into effect. Probably the references to it were merely "bluff."

Therefore it is true to say that, with the exception of the events of 1866-7, interest in the general strike declined in Britain during the second half of the nineteenth century, but increased on the Continent, where a good deal was said and written on the subject—but very little was done. From the literature, however, it is possible to distinguish fairly clearly four forms of the general strike; viz. (a) revolutionary, (b) anti-war, (c) political and (d) economic.

The revolutionary form, advocated very largely by the French Syndicalists, means that the proletariat would "down tools" as a means of paralysing the bourgeois economic system, and setting up some other form of social organisation in its stead. Professor Meredith Atkinson has suggested that "the extreme theorists of the French School" regard this as an inspiring "myth" useful to keep up the workers' courage and enthusiasm.¹ It is, indeed, questionable how far they would be prepared to seize the first good opportunity to attempt to translate theory into practice.

The general strike against war is another form. Its possible efficacy seems to depend upon two factors, viz. (a) the extent to which national passions are inflamed at the time, and (b) the possibility of getting a simultaneous general strike in *both* would-be belligerent countries. "This looks well on paper," says Mr. G. D. H. Cole, "... but there is nothing so certain as that, at the first breath of a war-scare, all the peaceable professions of the workers will be forgotten, and jingoism will sweep like a scourge over the country."² Experience in 1914 certainly confirms this view. In 1920, "direct action" in the form of a general strike was threatened in case Great Britain should go to war with Russia. Neither the war nor the strike took place.

The political general strike aims at bringing pressure to bear upon the Government in order to force it to take a specified line of action. Thus this form of the general strike cannot be said to be revolutionary, for it threatens neither the existing structure of the State nor the Government. But it might with more justice be described as unconstitutional, especially in a country where the great bulk of the people are enfranchised. Sweden has had one strike of this type (in 1902), which was merely an

¹ Article on "History of the General Strike," in *The Nineteenth Century Review*, June 1926.

² *The World of Labour*, p. 196.

organised protest for a fixed period. In Belgium there have been three political general strikes: in 1893, 1897 and 1902. The first succeeded to some extent, largely because it was a novelty; an unknown quantity: the others failed because they were not. The German Trade Unions employed the political general strike in 1920.

The general strike on economic grounds is really an extended form of the "sympathetic strike," but cases might easily arise in which it would be very difficult to decide whether purely economic motives alone, or mixed economic and political motives, really lay behind the strike. The idea of the complete solidarity of labour, especially in defence of existing wages and hours, is not new. From Owen's day it came down, manifesting itself in sympathetic strikes, the Triple Alliance of miners, railwaymen and other transport workers, and the Congress of Trade Unions, until at last, in May 1926, the people of Great Britain found that a general strike in defence of the coal-miners' standard of life had actually occurred.

The contrast between 1839 and 1926 is complete. The recent general strike was called by responsible leaders of the Trade Union movement; its objects were economic; and a strong organisation, with large funds, existed to carry it into effect. On the other hand, the opposing organisation was far stronger than anything that could have been produced ninety years ago. The "sacred month" proposal was made, as we have seen, not by Trade Union leaders, but by political agitators who had little solid support from trade unionists as individuals, and rather less from the unions themselves. Moreover, there was, in the 'thirties, no national organisation capable of conducting a great general strike, and no funds to support the strikers. The "national rent," which barely supported the Convention and its expenses, would have ceased to come in if a general strike had actually commenced. But the weight of the evidence gathered into the foregoing pages indicates clearly that the project would never have materialised, even if the members of the Chartist Convention had been better leaders than they were.

It seems that the future of the economic general strike depends primarily upon (1) the co-existence among trade unionists of great numerical and financial strength, coupled with a high degree of solidarity upon a broad issue; (2) the national temperament, and (3) the ratio between the organised industrial workers and all other sections of the community. Where the disparity in numbers is largely in favour of the latter, the economic general

strike has no chance of success, so long as the national temperament is of the steady, stolid, orderly type. Thus in the Anglo-Saxon, Teutonic and Scandinavian countries the economic general strike appears to have little future. But, on the other hand, we must not forget that in industrial conflicts, as in wars, the immediate causes tend to be forgotten in the heat and incidents of the struggle.

ALFRED PLUMMER.

FAMILY ENDOWMENT AND THE BIRTH-RATE IN THE EARLY NINETEENTH CENTURY

BOTH from the point of view of the supporters of Family Endowment schemes and their opponents the eugenic effects of the system loom very important, judging from the vast amount of criticism and speculation in which both sides indulge. But there is so far on either side an astonishing lack of unanimity as to the nature of these effects.

This must naturally be the case when the scheme is viewed from such diverse angles as that of the Neo-Malthusian and the Race Suicide theorist, and where, moreover, positive evidence is so rarely available to support the contentions of any side.

It is our purpose, then, to challenge an assertion very frequently made both by opponents and supporters of the scheme, namely, that it is a means of encouraging large families.

On this assumption this tendency ought to show itself in vital statistics in the form of an increased birth-rate. The thesis we want to maintain is that this does not happen. On the contrary, we believe it will be possible to trace a definite correlation between such a scheme and a decreasing birth-rate. If increase in the population can be shown to result, and we do not think this has been done, it will be in the form of a decreasing death-rate among children during the years when they come under the scheme.

The effect of this conclusion would be to shift the whole of the Populationist's objection to the introduction of family endowment. We may find many to argue that it is a bad and dangerous thing to encourage the birth of more children into a world already full almost to the optimum point. But there are few now who will carry this argument so far as to recommend a drastic reduction in the standard of living of large sections of the population, not indeed in order to decrease the number of their children, but in order that more of these children may be weeded out by malnutrition and disease before they reach maturity.

The argument is probably familiar that Family Endowment restricts population by raising the standard of living of those to whom it applies. A higher standard increases self-respect

and the possibility of a good life. Man and woman alike recognise the impediment of a large family to such a good life, even if the economic burden of the children is not to be borne entirely by them. They therefore voluntarily restrict the size of the family, and a decreased birth-rate, that desirable end of all but the Race Suicide theorists, will result.

But arguments on either side are empty theorising until such time as they shall have stimulated investigation into the objective facts. What has happened when Family allowances have been tried? Has an increase or a decrease in the number of births resulted? With a view to answering such concrete questions as these we have undertaken an inquiry into the actual working of a Family Endowment scheme in England under conditions least favourable to our contention.

From 1795 to 1834 there existed in this country over districts varying in extent and character a system of making up the wages of agricultural labourers to a subsistence level out of the Poor Rates. The needs of the labourer, and hence the minimum of his weekly requirements in money and food, were calculated according to the number of children in his family. A typical scale is that used by the Cambridge Justices in 1821, a period when the "subsistence" level was calculated on an extremely low basis, owing to the pressure on the Poor Rates.

COUNTY OF CAMBRIDGE

Condition of family.	Value in quartern loaves per week.
Single woman.	Value of 3 quartern loaves per week.
" man.	" 4 " " "
Man and wife.	" 7 " " "
Man, wife and 1 child.	" 8 " " "
" and 2 children.	" 9 " " "
" and 4 or more children.	" 2 quartern loaves per head per week.

It is difficult at this distance of time to calculate whether the addition of the extra loaves per week, which, assuming the needs of man and wife to be fixed at seven quartern loaves, increases progressively with the increase in the number of children (when there is one child, allowance for it is one quartern loaf; when there are six, $1\frac{1}{2}$ loaves per head), was sufficient to act as a spur to the procreative tendencies of the labourer. But it is interesting to notice that at the time when the scheme was working the opinion of contemporaries was unanimous in condemning it on the ground that it led to improvident marriages,

bastardy and an increase in the legitimate birth-rate also. Such statements abound in the Reports of the Poor Law Commissioners. Chadwick, in giving evidence from Leckhampstead, says, "the effect was that the young people married much earlier in order to obtain the bread allowance." "Large families, legitimate or not," says Mr. Villiers, "were considered by them an advantage." A reference occurs to "the increase of population, which evidence shows to be produced by the present state of the law and its administration" (Report, p. 230). We may take it then that in the eyes of those better equipped than ourselves to judge of the efficacy of the bribe, even such a meagre scheme of payment per number in family was sufficient to lead to those large families whose existence we sought to discern statistically.

The search for this proof is still in progress. Our method was, in brief, to find movements in the birth-rates of England generally, of counties especially affected by the scheme, of specified parishes stressed by the Commissioners and their correspondents in 1834 and in subsequent reports, for a space during part of the period when the Speenhamland Family Allowance scheme was in operation, and of the same places for another period later in the century. It will be objected, perhaps, that it is useless to compare two widely separated periods in this way and expect differences to be due to one factor only, operating in the earlier period and removed in later. Surely a host of other factors have varied at the same time. But the whole weight of those factors should be in the direction of lower figures for the later period, or at least a rising rate for the earlier and a slumping rate for the later period.

By 1859, when the second period which we have taken for investigation begins, the Public Health Movement has begun, the tremendous percentage increase in the population figures has dropped. And since the death-rate can hardly be supposed to have risen during a period of health improvement, surely, it will be said, this diminished rate of increase must be due to a falling birth-rate. It is difficult to be dogmatic on this particular issue, owing to the hypothetical nature of the earlier statistics. Figures for births are not moderately accurate until 1851; they do not exist until 1841. The earlier figures based on Baptism Registers must necessarily be taken with caution. But if we know of no outstanding change that would affect the proportion of babies born which were also baptised, we can at least compare figures compiled from parish registers with one another if not with the more accurate figures of the Registrar-

General's Report. Below then is a temporary result in statistical form of our investigation into the effect of Parish Relief by Family Allowances on the actual birth-rate as far as calculable.

MOVEMENTS IN BIRTH-RATE UNDER SPEENHAMLAND AND AFTER

Place.	No. of births per 1000 per annum.					
	Under Speenhamland. Baptisms Registered.		After Speenhamland. Registrar-General.			
	1811.	1821.	1850.	1855.	1859.	1864.
England and Wales	33.3	28.6	33.4	33.8	34.94	35.04
Bedfordshire	31.3	29.08	36.08	33.7	36.4	35.8
Kent	33.3	31.4	31.96	31	33.1	—
Essex	30.3	27.6	32.62	31.0	39.1	32.6
Nottinghamshire	29.4	30.2	—	—	39.3	34.9

The definite slump in the baptism rate comes between the years 1811 and 1821, a period when the number of deaths per 1000 persons living has declined from an estimated 20 to 18.2, and when the increase in the population is at the rate of 1.8 per cent. per annum, the highest that it has ever reached. Other figures for the period investigated, though not yet sufficiently complete, fully bear out this decreasing birth-rate correlated with the presence of Parish Relief on a Family Allowance basis. Burial figures as far as ascertained indicate the tendency to a rapidly decreasing death-rate also.

The only case in the above table (Nottinghamshire) in which an increased birth-rate is shown between 1811 and 1821 is also the only case in which industrialisation, and consequent importation of men and women at an age when they would be likely to be producing most children, can be indicated as a factor.

It may seem unsound to base so sweeping an assertion as ours on so slight statistical evidence. But such figures as have been collected certainly point to the hypothesis (1) that the rapid increase in population in the early years of the nineteenth century was due to a decreasing death-rate; and (2) that the Family Allowance scheme operating during a part of this period was a factor in decreasing the birth-rate. The first of these hypotheses has, we believe, been fully borne out by the investigation undertaken by Miss Buer and published in *Health, Wealth, and Population*. The second we hope to prove more fully by

further investigation into the birth-rates and death-rates of smaller groups whose concern with the Speenhamland system can be more accurately delimited. We do not mean that a more accurate statement can be obtained by study of a small group where special factors may be operating than by study of a large one where these factors cancel out. But by totalling the results of the investigation for a large number of parishes of whose application of the system we have direct evidence, we shall be able more nearly to determine the exact influence of a flat rate allowance system on the birth-rate.

It will at that stage be easier to answer the objections of those who would account for the figures by reference to other factors. The most deadly alternative hypothesis that can be brought up is the charge of absolute unreliability of the figures. It may be said that while most people are buried, the number baptised may vary enormously from year to year, and no reliance can be placed upon a birth-rate compiled from baptism registers. In fact the birth-rate for 1821 as worked out from the sum of the estimated increase in the population for that year and the estimated number of deaths comes to 34.1 births per thousand persons living, showing a substantial increase, instead of a remarkable decrease on the 33.3 birth-rate given for 1811. But this result is vitiated if the 1811 birth-rate is worked out on the same basis, so that we have the following result.

BIRTH-RATES AND DEATH-RATES FOR ENGLAND AND WALES,
1811 AND 1821

Year.	Population.	Est. No. deaths.	Est. No. births.	Excess births.	Est. inc.	No. of Baptisms per 1000.	Corrected Births per 1000.
1811	10,150,615	203,000	333,995	130,995	182,826	33.3	38.1
1821	11,978,875	217,999	342,599	125,600	191,831	28.6	34.1

Further, a birth-rate worked out from the survival plus the death-rate has the demerit of being based on a too high figure for the deaths, thus making the 1811 rate much higher than seems in any way probable, while it does not take into account the possibility that a large percentage of the increase in the number of the population between 1811 and 1821 may have been due to immigration from Ireland. We agree then that our figures may be inaccurate, but we do not see a means of improving their accuracy, and, again, it will be far safer to

correct the baptism rate by an addition of survival and death-rates on the areas especially affected by Speenhamland, precisely those not likely to have been affected by Irish immigration.

For various reasons it would be useless to advance the suggestion that a decrease in the means of subsistence involving the substantial lowering of the labourers' standard of living was responsible for the decreased birth-rate. Firstly, this argument has for its basis the teleological view that population must restrict its numbers when the means of subsistence fail; while the period under consideration is one during which population is increasing at an unprecedented rate, and the new industrial appliances are increasing the means of subsistence. Secondly, an examination of differential birth-rates to-day shows a universal tendency to an increasing rate among those classes of workers whose standard is most depressed. We have no reason for supposing that under similar conditions of depression in a complex society there would be an opposing tendency to that observed, a tendency to restrict the family. Rather, we reiterate our own hypothesis. The tendencies stated as antitheses above may be synthesised by the conception that a low standard leads to an increased rather than a decreased birth-rate, but that under bad conditions a larger number of children die before they reach maturity. A decreased *survival* rate, therefore, results from a lowering of standards. Speenhamland applied the necessary panacea to inhibit the "natural" high death-rate among the numerous children of the depressed classes. It was, we believe, the larger numbers surviving, and not the larger numbers born, that was responsible for creating the impression among contemporaries that the labourer deliberately set out to increase his family in order to obtain an allowance for the extra children. For ourselves, the antithesis arises that statistics show an even smaller number of children being born, proportionately to the numbers of the population. If adequate analysis of the population into age-grades and sexes existed, it might be possible to show to what degree the lower birth-rate is due to a different composition of the population. If more children had survived in a previous decade, then the population will be largely composed of individuals who have not yet arrived at the age of puberty. At the same time, the decreasing death-rate may be supposed to have affected those who had passed the age at which procreation or child-birth was possible. Thus the corrected birth-rate (number of births per 1000 women between the ages of 15 and 55) would be necessary for a positive proof

of the nature of the influence of Family Allowances. But it would be impossible to get figures anything like detailed enough from the earlier censuses, for the purpose of compiling such a birth-rate even for the major divisions. Certainly it would be a hopeless undertaking for the small parishes. We must be content to counter the argument of the different composition of the population by referring once more to the factor of Irish immigration, which would redress the balance by bringing in a large proportion of young men and women.

If, then, inaccuracy, the influence of a depressed standard of life and the different composition of the population are not enough to explain away a positive decrease in the birth-rate, the only other relevant factor does seem to be a system of Family Allowances. It will follow from the rejection of other factors as fully explaining the figures, that the Speenhamland system of poor relief tended to produce a decreased birth-rate.

In what way this came about it is not incumbent upon the student of social fact as such to explain. One may, however, hazard a guess. Possibly, though no one suggests that the survival of former children decreases the probability of conception, yet it may be that after a certain number of children have survived, human beings even at a miserably low level are less keen to have more children, and will utilise whatever traditional or scientific means they have to prevent conception or procure abortion. If this were so, it would follow that any fall in the death-rate among infants and young children is likely to be correlated with a corresponding fall in the birth-rate. From modern figures that would seem to hold good; though it is generally maintained that they are related not as cause and effect, but as parallel effects of the same causal complex. The view that they are related as cause and effect, or at any rate that they interact on one another, is, however, tenable on the above hypothesis. It would then follow that the effect of Speenhamland on the birth-rate in the early years of the nineteenth century is only one example of a general law that any Family Allowance system makes for smaller families; that the effect of adequate public provision for children would not be an increase in the numbers to be provided for. Much more investigation would be necessary in order to establish this law; but the inferences which would follow are instructive. One of the arguments advanced by Miss O. Vlasto in the December 1926 number of the *ECONOMIC JOURNAL* in support of a system of allowances differentiated according to income, is that the "eugenic re-

action " of a flat rate would be a positive inducement to larger families among the unskilled and lowest paid workers, and no inducement whatever to the more desirable elements of the population, the skilled workers, out of whose meagre surplus the scheme would be financed. One of the assumptions on which this argument appears to be based is that Family Allowance schemes as such tend to induce those benefited by them to have larger families. If the axe can be laid at the root of this assumption by showing that Family Allowances, even in the case of pauperised families, have the opposite tendency, a large part of Miss Vlasto's argument falls to the ground. The economic reactions of a flat rate may be a nearer approach to the levelling of incomes, but the eugenic reactions are more dubious. Fewer of the "low grade" children may be born. If more survive, they will be improved to the extent that environmental conditions are capable of improving human beings. There is, on the other hand, no reason for supposing that the artisan will be piqued into restricting his family if an attempt is made to lower his wages. From the past history of artisans and birth-rates, nothing of the kind would follow. Eugenically, an increase in his numbers, economically, increased resistance through the unions to any Family Allowance scheme, seem at least equally probable.

But apart from this special argumentation, the more cheerful prospect presents itself that there is no need to fear either prosperity for the broad masses of the people or a fairer distribution of income through some Family Endowment scheme, on the ground of their reactions qualitatively or quantitatively on the population, if it be true that increased care of children will be correlated with fewer of them. The new problem will be, how any better stock can be produced if it be true that evolution depends upon a selection of the most desirable variations in any one generation. A survival rate that rapidly comes to mean that 100 per cent. of those born reach maturity, must cut off any hope in that direction.

We conclude by reiterating the hypothetical nature of our present result in the attempt to formulate the relation between provision for children by someone not responsible for their birth and the numbers born. Not only is a more detailed investigation into the effects of Speenhamland necessary to support our hypothesis; inquiries into other allowance schemes, such as those in operation now on the Continent, in Australia, among certain sections of the population in England, where relevant

vital statistics are available, is essential. In these modern cases more accurate and more detailed figures should be obtainable from which more certain deductions can be drawn. It may be possible to find whether any movements in the birth-rate are correlated with alterations in the scale of Family Allowances, and to see, also, if any public health schemes or maternal welfare clinics associated with such systems have a bearing on the numbers born during their operation. Better control groups could also be taken. When this has been done we shall be in a position to meet criticism with facts. At present we can only urge that nothing has been produced to show that Family Allowances are correlated with an increasing birth-rate, that our figures so far as they go are most simply explained by the hypothesis that a Family Allowance scheme results in a decreased birth-rate.

J. S. BLACKMORE

F. C. MELLONIE

THE COMBINATION LAWS RECONSIDERED

IN a recent article it has been asserted that the Combination Acts of 1799 and 1800 were "the first legal enactments against the right of working men to combine for an increase of wages or a reduction of working hours."¹ This is contradicted not only by the Statute Book, but by Mr. and Mrs. Webb, and by itself would need no comment. But Mr. and Mrs. Webb themselves speak of "the far-reaching change of policy marked by the severe Acts of 1799-1800,"² and Mr. and Mrs. Hammond say "the Combination Laws lasted for a quarter of a century, and during that time the workpeople were at the mercy of their masters."³ Combination laws of course date from a much earlier period, and there is much evidence that the legislation of 1799-1800 represented no change of policy, and that its effect has been greatly over-estimated.

The chief authority for the effects of the Combination Laws (there were some thirty or forty of them, including Scottish and Irish Acts) is the evidence given to the parliamentary Committee on Artisans and Machinery in 1824. This evidence was carefully arranged by Francis Place to show that the laws were oppressive, that they were not only ineffective in preventing combinations but did in fact encourage them, and further, that if the laws were repealed, strikes would cease. The witnesses were chosen to represent different trades and localities and instructed "to state the evils of the Combination Laws." The case against them was thus fully stated; nevertheless it appears from the evidence that the Act of 1800 (which replaced that of 1799) was by itself a negligible instrument of oppression.

This was also the opinion of George White, the parliamentary agent who drafted the repealing Act of 1824 and was clerk to the Committee on Artisans and Machinery, and who, according to himself, had made the laws relating to masters and workpeople

¹ Judge Atherley Jones, *Fortnightly Review*, December 1926.

² *History of Trade Unionism*, ed. of 1919, p. 64.

³ *The Town Labourer*, ed. of 1925, p. 129. Mr. and Mrs. Hammond mention the earlier Statutes but say (following Mr. and Mrs. Webb) that "before the famous legislation of 1799-1800, the State forbade combination, not as infringing the freedom of employers, but as infringing its own authority." *Op. cit.* p. 112.

"his particular study for twenty years."¹ He considered the chief mill-stone round the neck of the worker to be the thirteenth clause of the Act of 5 Elizabeth, c. 4 (the Statute of Artificers): "persons who shall undertake to make any ship, house or mill or any work taken by the gross or piece and shall depart before finishing, unless for non-payment of wages, shall be imprisoned one month and fined £5." (This is not a quite correct citation of the Act, which does not impose a fine but allows the master to bring an action for £5 damages in addition to other costs and damages.) "This clause," say White and his collaborator (apparently Gravenor Henson, the framework knitter), "has been much abused, as in many businesses they never finish their work . . . therefore if any dispute ariseth respecting the amount of wages, and a strike or turn-out commences, and men leave their work, having words, the master prosecutes them for leaving their work unfinished. Very few prosecutions have been made to effect under the Combination Acts, but hundreds have been made under this law, and the labourer can never be free unless this law is modified; the combination is nothing; it is the law which regards the finishing of work, which masters employ to harass and keep down the wages of their workpeople; unless this is modified, nothing is done, and by repealing the Combination Acts you leave the workman in ninety-nine cases in every hundred in the place where you found him—at the mercy of his master."²

He is not entirely consistent on the Act of 1800, however, for though he says that "it has been in general a dead letter upon those trades upon whom it was intended to have an effect; namely, the shoe-makers, printers, paper-makers, ship-builders, tailors, etc.," he adds that "it has been extensively felt in general local manufacturing trades." As proof of this he instances the case of the stocking-weavers of Nottingham (actually Leicestershire), an episode related at greater length in the evidence to the Committee of 1824. They were in great poverty owing to reductions in rates of pay since 1815. The workers' committee drew up a list of piece-rates, and there had been strikes to enforce it in 1817, 1819 and 1821. The men were supported by public opinion, by some of the masters, and by many local notables, including the lord

¹ G. White, *A Digest of all the Laws respecting Masters and Workpeople*, 1825 (in Add. MSS. 27804), dedication to Peel. This pamphlet repeats verbatim much of an earlier one referred to in the note below.

² *A Few Remarks on the State of the Laws . . . regulating Masters and Workpeople, intended as a Guide for the Consideration of the House in their Discussions of the Bill for repealing the Acts relating to Combinations of Workmen*. Printed for the Authors. (Presentation copy from White to Place in Add. MSS. 27804.)

lieutenant of the county, who subscribed to their funds. However, after the third strike the workers' committee were prosecuted under the Combination Act, four were convicted, they appealed, and the conviction was quashed at the Sessions. The prosecution was a monstrous one, but it certainly does not show that the Act had any very great effect.

The evidence of the inquiry as a whole is equally negative on the results of the Act of 1800. There was occasional confusion among the witnesses as to the Acts under which prosecutions had been made—whether for combination, conspiracy, riot, assault, breach of contract or leaving work unfinished. Mr. and Mrs. Hammond instance three cases from the *Minutes of Evidence* of convictions under the Act of 1800. One of these appears to be a conviction for leaving work unfinished, though the witness, a Stockport weaver, thought it was “under the Combination Laws.” Four of the convictions mentioned by witnesses seem to have been under the Act of 1800, and one of these was confirmed by the Sessions on appeal. There were also three convictions quashed on appeal, including a case at Sheffield, where the men who opened negotiations after a strike of ten weeks were charged with combination “for treating for others than themselves.” The sentence was reversed at the Sessions when the men showed that the masters had agreed to combine not to raise wages.¹ There was also an incident which shows considerable lack of familiarity with the Act of 1800. Some master linen-weavers of Knaresborough, after a twenty-eight weeks' strike in 1823, published an abstract of the Act of 1799 (repealed in 1800) to induce the men to return to work.

But what the inquiry does show is that the Act of 1800 was a far less potent instrument of oppression than a prosecution for conspiracy at common law. This had been the general procedure before 1799, even in trades regulated by special Acts forbidding combination, and continued to be so after the legislation of 1799–1800. For instance, the prosecution of *The Times* compositors in 1810 which started Place on his campaign against the Combination Laws, was under an indictment for conspiracy, sentences of from nine months to two years' imprisonment being given.

Under the Combination Act the maximum sentence was three months' imprisonment, but this limitation does not seem to be the chief reason why successful prosecutions under the Act were, as White said, “very few.” Mr. and Mrs. Hammond have shown that the Act of 1799 was the indirect result of a petition from

¹ File-makers. Evidence of Bullock.

the master millwrights for leave to bring in a Bill for the better preventing of unlawful combinations of workmen employed in the millwright business, on the plea "that the only method of punishing such delinquents under the existing laws is by preferring an indictment, at the [next] Sessions or Assizes after the commission of the offence, but, before that time the offenders frequently remove into different parts of the country. . . ." Since at least the middle of the eighteenth century there had been a movement for the extension of summary prosecution before Justices of the Peace for petty offences to prevent the delay and expense of indictments at the Sessions or Assizes, which led to reluctance to prosecute, and, if bail was not forthcoming, to considerable terms of imprisonment while the accused were waiting for trial. It was on these grounds that Henry Fielding had suggested that petty larceny should be made a summary offence, instead of only an indictable one. Thus, it was hoped, punishment would become lighter, since the sentences were limited, but more certain. Summary procedure was also increasingly used for a number of new offences, such as dog-stealing, offences under the Acts for protecting chimney-sweepers and coal-heavers, and under the new paving Acts. Each Act of this sort (if debated) was inevitably opposed as trenching on trial by jury and the liberty of the subject, but, as a matter of fact, the intention of the Acts was largely defeated by appeals to the Sessions (often in a distant part of the county) and the frequent quashing of convictions on technical points. A number of Acts consequently became dead letters or nearly so. In many cases this was regrettable; in the case of the Combination Act, the discouragement of prosecutions was doubtless a good thing, as the occasions when the masters were thrown back on the common law with its severer penalties were probably few compared with those when no prosecution was attempted.

This attitude towards summary prosecutions is of considerable importance in the understanding of the social history of the period, and not least in the case of the Combination Act. It was the subject of a bitter complaint by a London police magistrate in 1821: "It is not, I believe, generally known that informations before magistrates must be drawn up with exactly the same care and nicety as indictments in courts of law; with this extra inconvenience that, in nineteen out of twenty cases, an appeal from the conviction is permitted to the Quarter Sessions, and that without the appellant being obliged to allege any reason whatever; the consequence is, that a vast number of informations,

substantially founded in justice, fail before the magistrate; and of those which do not, a great many more are quashed on appeal at the Quarter Sessions. . . . I must not forget too the gross absurdity of legislating to stop an offence of every day's occurrence, by what is humorously called a summary remedy before the magistrate; clothing it, at the same time, with all the difficulty, delay and expense of a suit at law."¹

He might have added that a conviction confirmed at the Sessions ran considerable risk of reversion in the King's Bench, and further, that what was difficult for a metropolitan police magistrate and his skilled clerks was far more so for a country justice. The attitude of the King's Bench towards justices' convictions was laid down in a number of leading cases. "A tight hand ought to be held over these summary convictions," the judges declared in quashing a conviction for stealing fish, because "it did not appear on the conviction that the fishing was without the consent of the owner," who was, presumably, the prosecutor.² Another leading decision was the quashing of a conviction for profane cursing and swearing (fifty-four oaths and a hundred and sixty curses, each one punished by a fine) because the actual imprecations uttered were not specified in the conviction.³

A very interesting case in 1805 on the Combination Act of 1800 shows that this Act was, in fact, interpreted with much strictness. Some cotton-spinners had been sentenced by two justices to three months' imprisonment for being "unlawfully concerned in the making and entering into a certain *agreement for the purpose of then and there controlling* W. Borradaile, etc., then and there carrying on the manufacture and trade of cotton-spinning . . . the said agreement not being a contract between any master and journeyman or manufacturer, for or on account of the work or service of such journeyman or manufacturer; contrary to the Statute of 39 and 40 Geo. III entitled, etc." The conviction had been confirmed at the Sessions and the men had then appealed to the King's Bench. It was evidently considered an important case, as Erskine had been briefed for the appellants, together with Garrow, Yates, Fergusson and Hardy. Erskine argued "that all the policy and convenience of the law and the weight of precedents . . . are against this general form

¹ L. B. Allen, *Brief Considerations on the Present State of the Police of the Metropolis*, 1821, p. 44.

² *R. v. Corder*: Burrow, iv. p. 2279 (1769).

³ *R. v. Sparling*: Strange, i. p. 497 (1722).

of conviction. . . . That the wholesome rule of law . . . is even more necessary to be observed in convictions before inferior courts than before the higher tribunals; namely, that every indictment should contain a charge of the offence with such certainty that the offence is plainly brought within the law which is alleged to have been broken."

All the judges concurred that the conviction was bad and should be quashed. Ellenborough in giving judgment said, "In all instances where jurisdiction is given to inferior magistrates . . . it is necessary that the Court should see that they do not exceed that jurisdiction. The Statute in question gives the magistrates a summary jurisdiction to repress agreements by journeymen *for controlling* their masters in their trade; they should therefore have stated what that agreement was, in order that the Court might see whether it were an agreement within the meaning of the Act. . . . And it is necessary to prove the criminal object as well as the criminal intent. . . . It is not enough that the agreement should be *for the purpose* of controlling, but it must be entered into *for controlling*, that is, for effecting that object, and I cannot say that this was such an agreement without seeing what it was." ¹

To the lay mind the distinction between "for the purpose of controlling" and "for controlling" is obscure, and that between "criminal object" and "criminal intent" decidedly subtle, and justices who were neither Shallows nor Silences might well have quailed at having to give a decision on the Act. Burn's *Justice* is singularly unhelpful, merely giving the following form of conviction: "A. B. is convicted before us . . . of having [state the offence] contrary to the Statute . . ." This is simply the schedule to the Act, of which a manual of Sessions Law says that it "exhibits one of those instances . . . where a general form of conviction is prescribed by the Act itself, but in such loose, general and imperfect terms, that much addition is requisite in order to bring the offence within the provisions of it." ²

By far the most important clause in Hume's repealing Act of 1824 was the one enacting "that journeymen, workmen or other persons who shall enter into any combination to obtain an advance or to fix the rate of wages, or to lessen or alter the quantity of work, or to induce another to depart from his service before the end of the time or term for which he is hired, or to quit or return to his work before the same shall be finished . . . shall not be liable to any indictment or prosecution for conspiracy, or to any

¹ R. v. Nield and seven others: East, vi. p. 417 ff., May 22, 1805.

² W. Dickinson, *A Practical Guide to the Quarter Sessions*, 2nd ed. 1820, p. 283. ECON. HIST.—No. 2.

other criminal information or punishment whatever under the common law or the statute law." The mere repeal of the Act of 1800 would have left things much as they were.

The Spitalfields weavers, who before the Spitalfields Act of 1773 had had an extensive experience of combinations, strikes and prosecutions, were of this opinion. When the outburst of strikes and violence which followed the repealing Act of 1824 led to a proposal to revive combination as a common law offence, they petitioned Parliament against it, on the ground that "the old practice of indictment for conspiracy will be again revived, and workmen will in a short time be more oppressed and degraded than they were under the old laws against combinations of workmen."¹ The old practice had never been given up, but there had been peace in Spitalfields since 1773.

Mr. and Mrs. Webb regard prosecutions of workmen for conspiracy as a new development in the later eighteenth century: "Already in 1786 the law of conspiracy had been strained to convict, and to punish with two years' imprisonment, the five London bookbinders who were leading a strike to reduce hours from twelve to eleven." The interpretation of conspiracy was admittedly extended in the eighteenth century,² but the extension to strikes of workmen (if it was an extension) took place in 1721, and prosecutions of this sort were common many years before 1786. In 1761 the *London Chronicle* records that "a number of bills of indictment were preferred and found before the Grand Inquest against the rebellious journeymen cabinet-makers who have lately combined together to raise their wages and lessen their hours of working, etc."³ Although the London tailors were regulated by an Act fixing wages and forbidding combinations, in 1765 and again in 1770 a number of tailors were indicted for conspiracy at the Old Bailey, not prosecuted under the Tailors' Act. The leading case on such indictments for conspiracy is that of the tailors of Cambridge in 1721. Mr. and Mrs. Webb say, following Wright's *Law of Criminal Conspiracies*, that it is uncertain under what law the men were convicted. But the case itself states explicitly that the men were convicted on the common law,

¹ *Spitalfields Weavers' Petition*, July 4, 1825. Add. MSS. 27802, fo. 48 ff.

² See Ellenborough's judgment in *R. v. Turner and eleven others*, 1811, commenting on Lord Mansfield's decision in *Eccles's case* (1783), which "was considered a conspiracy in restraint of trade, and so far a conspiracy to do an unlawful act affecting the public. But I should be sorry that the cases of conspiracy against individuals, which have gone far enough, should be pushed still further." The case in question was that of a party of men who had gone armed to snare hares.

³ December 12, 1761.

and it is cited without question in precedent books and manuals, as well as in the Law Reports, as the authority for such prosecutions.¹

In 1721 some tailors were indicted at the Cambridge Quarter Sessions for conspiracy to raise their wages. They appealed to the King's Bench, alleging a series of errors in the indictment. All but two of these were merely technical, they had been styled yeomen as well as tailors, the words *domini regis* had been omitted after *pacis*. The third count was that there was no crime on the face of the indictment, for it only charges them with a conspiracy and refusal to work at so much *per diem*, whereas they were not obliged to work at all but by the year by 5 Eliz. c. 4. The Court found that the refusal to work was not the crime, but the conspiracy to raise wages: "it is not for refusing to work but for conspiring that they were indicted, and a conspiracy of any kind is illegal, although the matter about which they conspired might have been lawful for them or any of them to do, if they had not conspired to do it." The final plea was that the indictment did not conclude *contra formam statuti*, "for by the late Statute 7 Geo. c. 13, journeymen taylorers are prohibited to enter into any combinations for advancing their wages, etc., and the Statute of 2 and 3 Edward VI makes such persons criminals." The answer to this was, "the indictment need not conclude *contra formam statuti* because it is for a conspiracy, which is an offence at common law." Wright cast doubt on this case as badly reported, because the Act of 7 Geo. I was not relevant, since it applied only to London tailors. But the fact that two statutes are cited in the report is explained in a note to be "because this case was twice argued, and here the two arguments are blended."² The appellants' counsel had on one occasion brought forward an irrelevant Statute.

Similarly, Lord Mansfield said in 1783, in connection with the indictment of some master tailors for conspiring to impoverish and prevent the prosecutor, another master tailor, from trading, "the illegal combination is the gist of the offence. Persons in possession of any articles of trade may sell them at such prices as they individually may please, but if they confederate and agree not to sell them under certain prices, it is a conspiracy; so everyone may work at what price he pleases, but a combination not to work under certain prices in an indictable offence."³ If this was a new

¹ *E.g.* Bird, *Law of Master and Servant*, 1795; W. Dickinson, *op. cit.*; Chitty, *Practical Treatise on the Criminal Law*, 1816.

² 8 *Modern*, p. 11 ff.

³ Cited by Wright, *op. cit.* (Eccles Case).

interpretation of the law of conspiracy it was based on the very old principle that combinations in restraint of trade were illegal, and there were, in fact, some very ancient precedents for it, though how far they were relevant in law is not for a lay person to discuss.

Combinations to raise the price of commodities were regarded in the same light as combinations to raise the price of labour. In 1773 the Government was disturbed at a report that the Westminster publicans had agreed to raise the price of beer, a step which might lead to riots. A letter was at once written to Sir John Fielding asking him "to discover the most active persons in this oppressive measure," as "it is become a matter for consideration how far it may be expedient to institute a criminal prosecution . . . as for a conspiracy to raise the price of provisions."¹ The justices induced the publicans not to alter the price of beer and a prosecution was not necessary. But Chitty gives a precedent of an Information in the Crown Office (thus eliminating the grand jury) against thirteen Southwark salt merchants for conspiring to raise the price of salt.²

It is generally said that although under the Act of 1800 masters were equally punishable for combinations, proceedings were, in fact, never taken. Clearly, whatever the letter of the law, masters were protected against legal proceedings in a variety of ways. Nevertheless, one witness in 1824 knew of two prosecutions of masters under the Act, both at London police offices. One was stifled, the result of the other he did not know. Masters were certainly indicted for conspiracy. Chitty gives as a precedent the text of an indictment of master rope-makers by journeymen for conspiring to prevent the employment of the prosecutors and others without the consent of their last masters.³ In Dickinson's *Law of Quarter Sessions* (1820) there is an indictment of master shoe-makers for the same offence. It cannot be supposed that these two cases were the only ones of their kind; indeed, Dickinson expressly states that the types of conspiracy at common law are so varied and numerous that he gives precedents of such cases only as are "most generally useful at country Sessions."⁴

These cases show that the law was consistent in regarding combinations in restraint of trade illegal, and rendering those who combined to raise the price of goods or labour or to prevent any man from carrying on his work liable to an indictment for conspiracy. It is also clear that simple association was not regarded as com-

¹ *State Papers Domestic, Entry Book*, 141.

² *Practical Treatise on the Criminal Law*, 1816, iii. p. 1163.

³ *Op. cit.*, p. 1169.

⁴ *Op. cit.*, pp. 279 and 283.

bination. Indeed, in common parlance, as well as in law, combination and conspiracy were once equivalent terms. The N.E.D. records that Captain Smith in his *History of Virginia* (1614) wrote: "they by a general combination in one day plotted to subvert the whole colony." Pepys spoke of "some few that do keep out of all plots and combinations." "When bad men combine, good men must associate," wrote Burke. Even in Adam Smith's famous passage the word combination could probably be replaced by conspiracy with little alteration to his meaning ("Masters are always in a sort of tacit *conspiracy* not to raise the wages of labour . . ."); he writes elsewhere in the *Wealth of Nations* "Were the Americans, either by combination or any other sort of violence, to stop the importation of European manufactures . . ." The common form of an indictment for conspiracy ran with legal redundancy, "for conspiring, combining, confederating and agreeing . . ." confederacy and conspiracy having the same meaning in early law.¹

The history of prosecutions for combination in England is a long one and does not begin with the tailors of Cambridge. In 1339 five London carpenters were charged before the Mayor, Sheriffs and Aldermen with making a confederacy among men of their trade to prevent foreign carpenters (men not free of the City) from accepting less than sixpence a day, and with having beaten and maimed John de Chalfhonte, who had taken service for less. A jury found that they had not beaten John, but had intimidated men from taking less than sixpence a day and an after-dinner drink.² Confederacies of London carpenters seem to have existed for some time, as in 1299 a carpenter was charged with gathering together a parliament of carpenters at Mile End, where they bound themselves by a corporal oath not to observe an ordinance by the Mayor and Aldermen touching their craft and their daily wages.³ Such ordinances could be decidedly oppressive, as appears from one made for bakers' servants in 1349 at the request of their masters. This was after a number of bakers' servants had been indicted for a conspiracy not to work except at double and treble the wages formerly given.⁴ It is to be noted that this was after the Black Death and immediately after the first ordinance of labourers, yet the men were not prosecuted under the ordinance for asking excessive wages but indicted for

¹ *Termes de la Ley*, 1641.

² *Plea and Memoranda Rolls of the City of London*, ed. A. H. Thomas, 1926, p. 108.

³ *Calendar of Early Mayors' Court Rolls*, ed. A. H. Thomas, 1924, p. 25.
Plea and Memoranda Rolls . . . pp. 225-6.

conspiracy. Among other cases in the same year an interesting one is that of some cordwainers who brought a bill of complaint against a number of their servants for entering into a conspiracy not to serve them except by the day and on their own terms, in contravention of the masters' right to rule the trade. The servants who were in court all confessed and threw themselves on the mercy of the Mayor and Aldermen, and in answer to questions gave the names of several others who had joined their confederacy, and though they did not know the names of all, said that the total number was over sixty.¹

Combinations to raise the price of commodities were, then as later, also the subject of prosecutions. In 1298 some London coopers were summoned at the instance of another cooper for contempt of the King and Mayor, in making an ordinance "against the dignity of the Crown and to the grave danger of the Commonwealth," that no one should sell a hoop formerly sold at a halfpenny and three farthings for less than a penny and other hoops in proportion, under a penalty.²

Combinations to raise the prices of food or labour became a statutory offence by the Act of 2 and 3 Edward VI, c. 15, called "A Bill of Conspiracies of Victuallers and Craftsmen," repealed with other Combination Acts in 1824. Chitty says that by adding the words "against the form of the statute" to an indictment for conspiracy the indictment will be upon this Statute instead of at common law, but common law prosecutions seem to have been general.

It is unlikely that the tailors of Cambridge were the first workers to be indicted for conspiracy at Quarter Sessions, though they may well have been the first to appeal against their conviction. Mr. Heaton³ has shown from the West Riding Sessions Records that in the early eighteenth century the magistrates dealt rigorously with combinations for higher wages, and cites as one out of a number of cases, that of six cloth drawers who combined not to work for less than three-halfpence an hour instead of the current penny, and were summoned for the conspiracy to the Leeds Quarter Sessions in 1706 and heavily fined.

If such sentences were rare there is an obvious explanation for it. So long as even the wages clause of the Statute of Artificers was enforced, strikes and combinations would have been almost impossible. As Mr. Heaton says, "the fine which hung over

¹ *Plea and Memoranda Rolls* . . . p. 231.

² *Calendar of Early Mayors' Court Rolls*, pp. 1, 2.

³ "The Assessment of Wages in the West Riding of Yorkshire in the Seventeenth and Eighteenth Centuries," *ECONOMIC JOURNAL*, XXIV. p. 210 ff.

master and servant alike would be sufficient to deter men from making any general or concerted demand for increased rates of payment." The Act not only penalised the giving or taking of wages above a maximum fixed by the justices (there was no minimum), but said that contracts of work were to be by the year, forbade the leaving of work unfinished under a penalty ("Servants unduly departing from work or refusing to serve shall be imprisoned until they undertake to complete their service"), and enforced a leaving testimonial signed by the head officer of the town or township or two householders. Those who could not produce such testimonials were to be imprisoned and whipped as vagrants.

Many of the clauses of the Act were in fact obsolete. Brown, who republished Lambard's book on the constable in 1677 with additions, deplores that the leaving testimonial had become obsolete, though "the penalty for the same be strict and severe." By the last decade of the seventeenth century the fixing of wages by justices seems to have become a mere form. Roger North accounts for this in a very interesting passage. "All ages have been possessed with that shallow mistake, concerning laws, that punishments will regulate. I have treated of this already and here only take up one instance. . . . And that is the Statute of Labourers (5 Eliz. c. 4, 1 Jac. 6). It was thought by the means of those laws that the price of work might be kept to a due station, proportionable to the prices of provisions. And to make sure of this (in their conceit), the execution of these statutes was intrusted with the gentlemen of the country who were justices and interested to lower prices of work. . . . : And ever since 1 Jac. the Sessions of Peace, in many places, have set the rate of work. And the justices who employ servants and labourers have done all that in them lay to hold the country to them; but in vain, as all know by experience. And the poor laugh at them, and cry *Statute Work against Statute Wages*: For laws will not make nor influence prices in open market; and they admit no reglement but that of men's occasions and desires." ¹

¹ *A Discourse of the Poor* (published 1753, but written when 3 and 4 Wm. and Mary was the last Act on the settlement of the poor), p. 64. The justices, however, in many places continued to make the usual annual proclamation of wage rates, or rather to confirm the old rates, as a mere formality, presumably because there was a penalty of £10 on each justice for neglecting to do so. The lists continued in some places to be reprinted even in the early nineteenth century, but the rates had no relation to actual wages, and no attempt was made to enforce them. Mr. Heaton thinks rates were enforced in Yorkshire up to about 1730, because after that they ceased to be reprinted but were merely confirmed. *Op. cit.*

Although many of the clauses of the famous Statute were obsolete by the end of the eighteenth century, it was still recognised as the foundation of the law of master and servant, and the clause penalising the leaving of work unfinished was, White tells us, ninety-nine times more oppressive in practice than the Combination Acts. That its intention had been repressive appears from an interesting paper in the Hatfield MSS. of *Considerations delivered to the Parliament*, 1559, in which the genesis of the Act is clearly to be traced. The note under the heading "Labourers and Servants" runs: "That the Statutes 12 Richard II, chap. iii, 'that no servant or labourer at the end of his term depart out of the hundred or place where he dwells,' etc., and 13 Richard II, chap. viii, ordering the justices at every session to appoint by proclamation the wages of workers, etc., be confirmed with the addition 'that no man hereafter receive into service any servant without a testimonial from the master last dwelt with, . . . witnessing he left with free licence of his master: penalty 10l.' So by the hand of the masters, servants may be reduced to obedience which shall induce obedience to the Prince and to God also."¹

How far does the legislation of 1799-1800 constitute a new departure? It was clearly not a new departure in spirit. Until this time eighteenth-century English Statutes against combinations had been concerned with particular trades only, but this was the natural result of the prevalent system of legislation by private-bill procedure on petition from the parties interested. Except for the apparently casual intervention of Wilberforce, supported by Pitt, the Act of 1799 would have applied to millwrights only. Those who spoke most strongly against it did so on the ground of its obvious defects in the loose definition of combination and the powers given to a single justice, maintaining that the existing Statutes were sufficient. Sheridan himself, who spoke, as on other occasions, without having read his brief (wrongly supposing the Act to be one to explain and amend other Acts) said, "its repeal will not be the means of letting the subject loose from the restraint of law, but will merely restore things to their former state, and give operation to laws which experience has proved to be perfectly adequate. . . ."² No opposition appears to have been made to the Act of 1800 which altered the objectionable provisions in the former Act. This Act merely added one more

¹ Printed in *Tudor Economic Documents*, ed. R. H. Tawney and E. Power, i. p. 325.

² *Parliamentary Register*, June 30, 1800.

to the many existing Statutes; and was found in practice so ineffective that it was seldom resorted to with effect.

It is certainly not distinguished from earlier laws by its severity, since penalties under the Act were limited to two months' imprisonment with hard labour or three without. The Act for the woollen trade (12 Geo. I. c. 34), that is, for weavers, wool-combers and framework knitters, had made it felony to assault or threaten masters for not submitting to "illegal by-laws and ordinances," and felony without benefit of clergy to break into a house or shop to destroy work. This was extended in 1749 to other textile trades—linen, hemp, flax, cotton and fustian, and to hatters, dyers and hot-pressers. In 1766, after an outbreak of violence in Spitalfields, it was extended to silk. These Acts were not at first dead letters, though their severity led to their disuse. Adam Smith said workmen in their combinations "always have recourse to the most shocking outrage and violence." In 1768 two Spitalfields weavers were executed for cutting silk in the loom.

If "the first twenty years of the nineteenth century witnessed a legal persecution of trade unionists as rebels and revolutionists,"¹ this was certainly not due to the legislation of 1799-1800 or to any recent change in the attitude of the judges. Much more research into the earlier history of industrial disputes is necessary before it can be assumed that the turn of the century witnessed any such change. But if it did, then the instances of compromise and tolerance, good sense and moderation, to be found even in the evidence given to the Committee of 1824 are the more remarkable. Mr. and Mrs. Webb conclude from White's remark that the law of 1800 had remained almost a dead letter on the trades for which it was intended, how "lax was the administration of the law," a phrase which from anyone but the chief authorities on the administrative methods of the period might seem to imply the existence of some machinery of control and inspection on modern lines. If the law was not enforced, the reason, of course, was that the masters did not choose to take legal proceedings either because the men's organisation was too strong for them, or because they did not care to risk the expense and uncertainty of the law, or because they did not wish to provoke ill-feeling. All these motives are to be found in the evidence of 1824. Place stated that trade clubs and successful strikes during the war period had been the chief means of the rise in wages in London trades.² These were trades in which the Acts against combina-

¹ S. and B. Webb, *op. cit.*, p. 63.

² *Trade Clubs, Strikes and Wages* (1834), Add. MSS. 27834.

tion had been admittedly inoperative. It was not only the strongly organised trades which had this immunity from prosecution, as, for instance, the Manchester engineers who controlled the supply of labour and regulated the admission of apprentices without opposition from the masters, because, as one said, "it is better not to contend with them, for they turn out and we lose our time." No workers were in a worse position than the handloom weavers, yet it was a Leeds woollen weaver who told the Committee that owing to a strike in 1819 conducted by the men's union, their wages had been raised and that the demands of the union for higher wages had never led to a prosecution: "the reason we are not punished is, because the magistrates in our neighbourhood do not like to put the laws in execution when they know or conceive that our demands are reasonable," and they recommended the parties to agree.¹ Strikes among cotton-spinners were frequent, yet it was a Stockport journeyman cotton-spinner who said that after a six-weeks strike of jenny-spinners (about 800) in 1818, there had been an amicable agreement to "split the difference," and "masters and men have since been more comfortable than ever they were before."²

If the Committee of 1824, the evidence for which had been staged by Place to show "the evils of the Combination Laws," could elicit these instances of moderation, one may be sure that up and down the country there were many others. The surprising thing seems to be that restrictions on combination were removed so much earlier in this country than in any other, and that the removal should have been substantially maintained even after the outburst of strikes and violence which followed the repealing Act of 1824. If the evils of the laws were largely psychological, they were none the less potent for that. It is a strange paradox that the laws which had been based on the ancient English doctrine that the restraint of trade is illegal should have been repealed in obedience to the full-fledged individualism of *laissez-faire*, and that now again, when the *laissez-faire* of the early nineteenth century is the most discredited of doctrines, the demand for some restriction of trade union activities should derive, ostensibly at least, from their interference with individual liberty.

M. DOROTHY GEORGE.

¹ *Minutes of Evidence*, p. 561.

² *Ibid.*, p. 431.

THE LONDON COAL-HEAVERS: ATTEMPTS TO REGULATE WATERSIDE LABOUR IN THE EIGHTEENTH AND NINETEENTH CENTURIES

THE London coal-heavers are an interesting example of a body of labourers whose organisation and aims remained curiously constant from the beginning of the eighteenth century (and probably earlier) till the middle of the nineteenth. Their attempts to obtain protection from Parliament illustrate the methods of industrial legislation of the period and the complications arising from administrative shortcomings. Their work was to unload the coal-ships as they lay in the Pool into lighters or barges. They worked in gangs, and the work, which was very heavy, could not be done by inexperienced men. This was more especially the case before the method of coal-whipping was introduced about 1758. Before this, the men worked in gangs of from fifteen to seventeen under a leader or foreman called a market-man, and raised the coals from the hold of the ship by shovels from stage to stage on a series of platforms. About 1758 the method of whipping was introduced,¹ that is, filling a basket or hod which was jerked or whipped by a pulley on to the deck, where it was measured by one of the City meter-men and emptied out into the barge. The coal-whippers worked in gangs of nine, ten or eleven (afterwards fixed at nine) under a foreman called a basket-man, who received and emptied the basket. In 1769 it was estimated that a third of the coal in the Port of London was unloaded by whipping, the rest by the older method, and the word coal-heaver then applied also to the whipper. Gradually the older process ceased to be used and the men were known as coal-whippers. The change in name (in official documents) took place between 1807 and 1830, by which time at least coal-heaving may be supposed to have died out. The coal-whippers in the nineteen-forties were able to describe the then obsolete method to Mayhew.

The ideal of the coal-heavers was to be a privileged body, limited in number, under civic control, with fixed rates of pay out of which a fund should be raised for sickness and old age and for

¹ *The Case of the Coal-Heavers respecting the Undertakers* . . . [1769]. In 1757, however, coal was said to be "unloaded by baskets" when coal-heavers were scarce. *Commons Journals*, 28th April, 1757.

their widows and orphans. This was the position of the Fellowship of Billingsgate Porters, whose work was to unload corn, salt and other measurable commodities on the quays and wharves within the City. These porters had once unloaded coal too,¹ but at some time between the reign of Elizabeth and the end of the seventeenth century the growth of trade and its extension beyond the City limits had caused coal to be taken over by a body of men known as coal-heavers, who lived chiefly in Wapping and Shadwell and were not free of the City. The coal-heavers were aware of this evolution in their calling and aimed at conditions as much like those of the Fellowship Porters as possible.

"As the Fellowship Porters," runs a petition of 1764, "were, by the increase of trade, much employed in several other branches of labour, which were more agreeable to them than the slavish and dirty part of the work . . . they, by degrees, forbore to have any further concern therein; and, at length, gave it up. Since which time, others took up that laborious employment, who, soon after . . . were, and still are, called and known by the name of coal-heavers, who, not being Freemen of London, became a distinct and separate body. . . ." ²

The earlier efforts of the coal-heavers were directed towards becoming a fellowship or a corporation. In 1699 they petitioned the House of Commons for a Bill "to establish them a fellowship under such government and rules as shall be thought meet after the manner of the Watermen, Carmen, Porters and Coachmen." ³ Nothing came of this, and in 1708 they petitioned the Queen for a charter of incorporation. The petition was referred to "the Lord Mayor and Court of Aldermen and to any other body of men that may be affected by such a grant." ⁴ Such a reference could have only one result; the City was opposed to the incorporation of journeymen or labourers, and the coal-trading interest would certainly not regard it with favour.

But regulation of some kind was urgently needed. The work was irregular to an extreme degree. In spite of attempts to space out the sailing of ships from the Tyne at regular intervals, contrary winds often kept them from sailing till a number had

¹ In 1589 each member of the fellowship was required to carry two turns every week in corn, salt or sea-coals, which would amount to a penny a week, for the relief of the lame, sick or impotent. Unwin, *The Guilds and Companies of London*, p. 362.

² *The Coal-heavers' Case* [1764].

³ Unwin, *op. cit.*, quoting *Commons Journals*, xiii. p. 99, a reference I have been unable to trace.

⁴ *S. P. Dom., Entry Book*, 106, p. 360.

accumulated. Gales from the south-west sometimes forced them to take shelter in Yarmouth Roads, while an east wind would prevent their sailing up the Thames till a sudden change filled the Pool with coal-ships. In 1768 it was said that if the ships were able to sail regularly and arrive according to plan, the number of coal-heavers was excessive. When there was a glut of ships unloading was much delayed for want of hands, and there were times when for weeks on end only a few of the men were employed.¹

As a result the fluctuations in wages were extreme. They varied from day to day and even from hour to hour. The men were paid at a rate of so much a head for unloading a score (twenty London chaldrons) of coals. In 1757 the rate varied from 1s. to 2s. 6d. or 2s. 9d. a score. According to the books of a firm of coal-factors the highest rate in 1756 was 3s. (on four days in September), the lowest 1s. (on one day in February).² But in 1768 anything over 1s. 6d. was held to be excessive, and at this time rates of 2s. and over were evidently exceptional. In spite of fluctuations, the earnings of coal-heavers were admittedly high; their petition to Parliament in 1764 runs: "as the work of these men is hard and severe, they are proportionately paid larger wages than other labourers. . . ." Adam Smith estimated their earnings at from 6s. to 10s. a day, or "four or five times the wages of ordinary labour," and accounts for it by the "hardship, dirtiness and disagreeableness" of their work, and its "unavoidable irregularity."

The chief element in keeping wages high seems to have been the quasi-monopoly given them by the nature of their work and their organisation in gangs. The men would make sudden combinations to raise rates when labour was scarce, and would stop work in order to increase the rate already agreed upon if more ships appeared in the river. They were much given to drinking, and if one man was absent, or drunk, the work of the whole gang was stopped.³

The grievances of the men were still more serious. They were victimised by a set of middlemen called coal-undertakers, who engaged and paid the gangs on behalf of the masters of the ships. They were almost all river-side publicans, and in slack times gave employment only to those who drank most, made large deductions from their wages on various pretexts, "forced them to pay 4d. a quart for beer not worth a penny, and sold them gin and tobacco

¹ *Public Advertiser*, 8th August, 1768. (One of a series of articles on the coal trade, evidently by Sir John Fielding.)

² *Commons Journals*, 28th April, 1757.

³ *C.J.*, 28th April, 1757.

not worth anything.”¹ Small beer was sold at the price of strong, “bad brandy and other strong liquors in short measure and at the best prices without their daring to complain.”² These were particularly serious injuries when a large consumption of beer was regarded as a necessary expense of the coal-heavers’ calling: “As their labour is very hard,” they say, “no man can go through it with less than a gallon of beer a day.”³

When the undertakers became established as middlemen is not clear, but the system was in existence in 1724.⁴ By 1750 at least there was a running feud between the undertakers and the coal-heavers, and the situation was made much worse by administrative conditions in East London, where the justices of the peace were certainly timid and reputed corrupt. About this time, out of twenty undertakers, nineteen were said to be river-side publicans who were in the habit of getting certain headboroughs (constables), “who were devoted to their interest, to take up any coal-heavers who grumbled, complained or made any disturbance in their houses, concerning the hardships imposed on them . . . and chiefly late on Saturday night; by which means they were carried to the watch house, and there exposed to public view (*in terrorem*) all Sunday,” to be brought on Monday before justices alleged to be in league with the undertakers, “who generally sent them to prison . . . unless they would agree to beg the undertaker’s pardon for pretended faults . . . and likewise promise to [*sic*] future submission, and in other cases to pay whatever damages the said undertakers should demand.” In order to indemnify themselves against legal proceedings on the part of coal-heavers, the justices in question were said to have taken, about 1751, bonds from the undertakers in £500 “for such their arbitrary and oppressive proceedings.”⁵

Consequently, in order to stop a state of things in which extortion was tempered by riot, the coal-heavers petitioned Parliament for a redress of their very serious grievances. This was the first of a series of complaints continuing at intervals till 1843. Several Acts were passed to check the abuses complained of, but only the last was successful. These followed two main lines: the first and the last aimed at eliminating the undertakers altogether, the others forbade undertakers to be publicans, to make deductions from wages or to pay in anything but current coin. The men were always anxious for a fixed rate of wages,

¹ *C.J.*, 27th March, 1770.

² *The Coal-heavers’ Case* [1764].

³ *The Case of the Coal-Heavers* . . . [1769].

⁴ *C.J.*, 12th May, 1729.

⁵ *The Case of Mr. Francis Reynolds* . . .

and in 1770 and 1807 a rate was fixed. The Bill they presented in 1758 contained a clause for the regulation of wages which was not allowed to stand.

In the eighteenth century industrial legislation was generally based on a petition for redress of grievances and was carried through by private Bill procedure. The function of the Government was to hold the balance between the various conflicting interests and to see that no combination in restraint of trade was countenanced. The first Coal-heavers' Act of 1758 is a completely typical example, and it is an expression of the aims of the coal-heavers, modified as to method since 1703, as they no longer ask for incorporation, but substantially the same as in 1843. These were, that there should be a due regulation of the coal-heavers to prevent disorders committed by them, that they should be protected from the oppressions of middlemen by being under the care of some impartial authority, and that thus protected they should establish a pension fund.

Evidence was given to the Committee of the House of Commons that the men were obliged to spend a certain sum daily at the alehouses of the undertakers, who made other deductions from their wages to the alleged amount of £7000 a year (another estimate says £10,000). It would pay them better, they said, to work for the masters at 20*d.* than for the undertakers at half a crown. In order to gain a more complete control over the men the undertakers had recently bought up all the coal-shovels, and induced the only two makers to work exclusively for them, and had then charged for shovels at the extortionate rate of a shilling a ship.

A coal-heaver stated that one Mr. Camphire, who had been the engrosser of the shovels, had told him that "he would give him a note to take out of his rotten Bill and he would punish the coal-heavers for applying to the House of Commons." This involved the undertakers in the greatest offence known to an eighteenth-century House of Commons—a breach of the privileges of the House—as well as in a combination in restraint of trade. Camphire was summoned, examined, denied the words, was confronted with witnesses, convicted of uttering them, and was brought to the bar to be reprimanded on his knees by the Speaker.¹

This incident, and the undoubted fact of the corner in shovels, probably procured the coal-heavers their Bill, to which there was

¹ *C.J.*, 9th February, 19th April, 28th April, 29th and 30th May, 2nd and 6th June, 1758.

much opposition from owners and masters of ships in the coal-trade, who maintained that it "will not only tend to the damage and hurt of the coal trade, but be of disservice and injury to the publick." The success of the undertakers in resisting repeated attempts to check their extortions is remarkable, and is probably largely owing to their relations with the coal-shippers and with the owners and masters of colliers. The cross interests and ramifications in the trade were many and complicated, and in fact its history from the sixteenth century onwards is one of repeated recriminations between different interests alleging combinations and oppressive dealings.¹ In 1729, in one of these recurrent crises of counter-accusations, it appeared that an office was kept at Billingsgate in correspondence with the fitters at Newcastle for arranging in what order the ships should be unloaded in order to keep up the price of coals. The keeper of the office was a coal-undertaker, and he defended the arrangement as essential to the shipping interest, which had been victimised by a combination of the London lightermen, who were the chief buyers of coals.² Mayhew was told that the undertakers before the Act of 1843 were relatives of the northern ship-owners, then also coal-exporters, so that the connection of interests seems to have persisted.

The Act of 1758 was fatally defective, but it was a turning-point in the history of the coal-heavers, and an interesting expression of their aims. The preamble declares the necessity for "a due regulation" of the coal-heavers, and that as they were "subject to no legal jurisdiction properly empowered to compel them to do their duty in all respects, obstructions and delays often happen in the unloading of coal-ships . . . to the great detriment of the publick." They were also subject to great abuses. The coal-heavers were therefore put under the "care

¹ In 1595 a Commission was appointed to inquire into the abuses in the coal trade, in connection with which the Council wrote on October 27 to the Bishop of Durham: "Whereas we are informed that the prices of sea coles are of late rysen to very highe rates within the Citty of London and elsewhere" . . . since "divers of the richer sorte of the towne of Newcastle havinge a lease from your lordship of xii cole pittes . . . do forbear to set the same a worke upon a covetous desire of excessive gayne to themselves and do worke in certain colepittes of their owne in other places which yelde a far worse sort of cole and less quantity. . . ." *Council Register*, 27th October, 1595.

² *C.J.*, 9th and 12th May, 1729. Each side proved its allegations, and the House passed a resolution "that several agreements and combinations have been entered into by the masters and owners of ships using the coal trade . . . unto the Port of London, and also by the lightermen of the said Port, which said agreements and combinations are illegal and tend to the enhancing the price of coals, to the oppression of the poor, the prejudice of several manufactures and to the lessening the public revenue."

and management" of the Alderman of Billingsgate Ward or his deputy, "who by virtue of such office is governor of the Fellowship of Billingsgate Porters, to whom in former times the unloading of all coal-ships in the river Thames did properly of right belong." He was to appoint a registrar of the gangs of coal-heavers who was to make arrangements for unloading with the masters of ships. Each gang was to appoint a foreman, who was to attend the agent daily from six to twelve a.m., when his gang was not at work. The agent was to receive and distribute the pay within three days of the clearing of the ship, without any deductions other than those specified in the Act. Deductions on pretence of money due for liquor or goods advanced to the men were forbidden under a penalty.

The fatal flaw in the Act was that it was permissive; those who desired to be under the management of the Alderman were to register themselves. There were other clauses with possibilities for mischief, though they were probably unenforceable. Labourers refusing to work, unless "ill or unable," were to be struck out of the register. If a man left a ship before she was cleared, 20s. was to be stopped out of his pay. Even the clauses relating to the great desire of the men, a pension fund, were likely to cause trouble. Two shillings in the pound were to be stopped out of wages to constitute a fund, on which the first charge was to be the expenses of procuring the Act and of administration. Out of the remainder, if sufficient, 7s. a week was to be paid in sickness, 6d. a day to those past work through old age, 40s. for the burial of any labourer whose own effects were insufficient, £5 for widows and 40s. for children under ten. The "charitable donations" (burial money excepted) were not to be made for the first year.¹

The office was duly opened in September 1758; forty-nine gangs registered themselves, and the Act worked for a time, it was said, "to the mutual advantage of the publick and the coal-heavers." But the undertakers soon discovered that the Act was not compulsory and succeeded in decoying the men from the office. Their first step was to send "circular letters" to Scotland, Ireland and other parts of England offering work at unloading coal-ships at which from 10s. 6d. to 18s. a day could be earned. "Many unthinking men flocked to London . . . expecting immediately to make their fortune." As they were unable to work in the coal-heavers' manner, with shovels, they "were set to work by the undertakers to deliver ships with baskets, which they call whipping, and received 2d. or 3d. per score more than

¹ 31 Geo. II. c. 76.

what they gave the labourers." The coal-heavers were then induced to leave the office by offers of higher pay and preference in employment, and representations that the deduction of 2s. in the pound was not compulsory. Finally the undertakers refused to employ any man who worked for the office and it was closed for want of support. The undertakers were again supreme and their deductions were heavier than ever.¹

This affair shows the defects of private Bill procedure in industrial legislation. The preliminary expenses were a burden on administration. The agent for the Bill was one Reynolds, an attorney and landlord "of a small brewhouse and alehouse thereto adjoining" in Wapping, who for some years had been carrying on a Press campaign against the undertakers and who acted as agent or registrar under the Act. Reynolds was, according to himself, ruined by the undertakers, who induced certain Wapping justices to refuse a licence to his alehouse, and concocted three separate charges against him of speaking "seditious words," by which, though "honourably acquitted," he was put to great expense.² He was alleged to have cheated the coal-heavers of £500 or £600,³ which may only mean that preliminary expenses amounted to this sum. At all events it was he who organised a petition to Parliament in 1762 for the amendment of the Act which was not followed up because he became a prisoner for debt.⁴

In 1764 the coal-heavers again petitioned for an amendment of the Act, but nothing was done, and in 1768 matters came to a crisis. The coal-heavers had been recruited by fugitive White-boys from Ireland, and it was probably these who introduced the methods of the secret society into Wapping. About February, according to one of the members, "forty-five coal-heavers entered themselves into a society by the name of Bucks . . . every member on his admission was sworn to be always aiding and assisting his fellow-members, and likewise not to reveal or divulge anything that was done, even though it was murder. . . ." ⁵ Out of a total of about 670 coal-heavers, two-thirds or more were said to be Irish, "a few of them quiet laborious men, the rest are of a riotous disposition and ready to join in any kind of disorders, and from 70 to 100 are the very dregs of mankind, capable of all kinds of mischief." ⁶

¹ *The Case of the Coal-Heavers* . . . [1769]; *C.J.*, 26th January, 28th April, 1762, and 28th January, 1764.

² *The Case of Mr. Francis Reynolds* . . .

³ *Treasury Solicitors' Papers*, No. 1408.

⁴ *C.J.*, 28th April, 1762; *Treasury Solicitor's Papers*, No. 1408.

⁵ *Ibid.*, No. 2696.

⁶ *Ibid.*, No. 1408.

At all events the situation was explosive, and from February till the middle of June the coal-heavers terrorised Wapping and Shadwell. First they disputed with the undertakers over wages and succeeded in raising them. Then they declared they would be under the Act of 1758, and applied to Beckford, as Alderman of Billingsgate Ward, to reopen the office. Beckford appointed one Russell as his agent, who employed John Green, keeper of the Roundabout Tavern in Shadwell, to negotiate with the men, and in March the office was opened. But in the meantime the cause of the coal-heavers had been taken up by a Wapping justice, Ralph Hodgson, who had opened an office where his clerk issued tickets at a shilling each, purporting to license the holders to work as coal-heavers, anyone attempting to work without one being ducked in the Thames at the end of a rope. Most of the Irish coal-heavers registered with Hodgson and chose "forty-five Brothers" to govern them and exclude all rival gangs.¹ Forty-five was an inevitable number in 1768.

Hodgson's motives may have been quixotic, or they may have been self-interested (as the Middlesex Bench thought), but his methods were a direct incentive to disorder. The coal-heavers went about with a banner inscribed "Misery redeemed from Slavery, Oppression and Want by Hodgson."² On St. Patrick's Day he marched at the head of a large body of coal-heavers through Wapping and Shadwell, each man, Hodgson included, wearing "a green herb in his hat called a shamrogge," and this "tho' not an Irishman, but a native of England, an utter barrister of Gray's Inn and one of His Majesty's justices of the peace for the county of Middlesex." Every five hundred yards or so, Hodgson halted and waved his cane, to be answered by the huzzas of the mob, the procession ending at a public-house at Stepney, where Hodgson entertained some of his followers at supper. This was after a series of riots and disturbances, and its immediate sequel was an attack on the house of an unpopular justice.²

Hodgson told the men that they were not obliged to register at the statutory office, and that if they did, 2s. in the pound would be deducted from their wages. Consequently no coal-heavers could be induced to register there, and though it had been demanded

¹ *Middlesex Sessions Records*, 1768, 19th May (petition of "the inhabitants" of Shadwell against Hodgson) and 8th September (representation to the Lord Chancellor for the removal of Hodgson from the Commission, Hodgson having been examined, and though his counsel had cross-examined the witnesses against him, he had produced no witnesses "except an affidavit of his own making, which he declined reading").

² *Public Advertiser*, 8th August, 1768 (article evidently by Sir John Fielding).

by the men, it came to be regarded as a means of breaking a riotous combination. Russell, after many attempts, through Green, to persuade gangs to register, advertised that unless gangs applied for registration in six days' time, "new gangs will immediately be raised, appointed and registered on the original establishment, and whoever shall presume to obstruct or molest the said gangs . . . will be prosecuted with the utmost rigour the law directs. . . ." This was a signal for a state of almost open war. Green, who lived among the coal-heavers, bore the first brunt of it. After preliminary threats to his life and attempts on his house, a concerted attack with fire-arms and brickbats, to the cry of "Wilkes and Liberty," was made on April 20 from about eleven at night till eight next morning. Green, with the help of a sailor who happened to be drinking in his bar, defended the house with great courage, firing from three blunderbusses and a musket loaded for him by the sailor. The coal-heavers, having openly purchased ammunition, took possession of the two houses opposite and fired from the windows into Green's house across a street only twenty-two feet wide.

The walls and ceilings of "The Roundabout" were riddled with bullets, three barrow-loads of brickbats and stones were taken out of it. The lower windows had been boarded up, as they had been broken in a previous attack. Two men were killed, one apparently by the mob, before Green began to fire, the other was shot dead by Green in the act of breaking down the door. It was established that Green fired first with powder only, and used ball only in self-defence and after repeated warnings. In the morning, his ammunition exhausted, he managed to escape and to hide in a sawpit, the mob being told that he had reached the river. At last the Guards came up with Justice Hodgson, who committed him and the sailor to Newgate for murder while no steps whatever were taken against the mob, whose ringleaders were well known and, indeed, continued to march about at the head of armed bands.¹

After this the disorder in the waterside districts grew rapidly worse. The sailors struck for higher wages, boarded the ships in the river, unrigged them, and for some time no vessels were able to sail. The attention of the Government was chiefly absorbed by the Wilkes mobs, which were threatening to pull down the King's Bench prison. A mob of sawyers pulled down a recently built saw-mill. There were strikes and disturbances by tailors,

¹ *Treasury Solicitor's Papers*, No. 1408; *London Sessions Papers*, July 1768. Cf. Walpole's *Letters*, ed. Toynbee, vii. p. 208 (an inaccurate account).

coopers, lightermen, watermen and others, which caused great alarm, as their usual procedure was to meet in Stepney Fields and march in a body to Palace Yard to present petitions.¹

The coal-heavers, who had begun the disturbances, remained the most violent. The seamen in the coal-ships were not among those who had refused to sail, as they were paid a lump sum for the return voyage from the Tyne, regardless of the time taken, and they were aggrieved at the coal-heavers, who kept them indefinitely in the river by refusing to unload the ships. The seamen were at last employed to unload, being paid at a rate of 1s. 6d. a score, less than the coal-heavers demanded, but in other ports than London the sailors unloaded the coal without being paid for it. The result was war between the coal-ships and the coal-heavers. At night there was constant firing between the ships and the shore. Attacks on the ships were beaten off by the sailors; the coal-heavers attempted to prevent their landing to get supplies. Bodies of coal-heavers marched about "armed with bludgeons, cutlasses and pistols, etc.," crying out, "Five pounds for a sailor's head and twenty for a master's; we will cut the lightermen's throats and murder all the meters" (the men who measured the coal while it was being unloaded). Green's acquittal at the Old Bailey on May 20 infuriated the coal-heavers against his witnesses. On May 24, two boat-loads of sailors who had come ashore, apparently by invitation to a conference with the coal-heavers, were attacked and a sailor called Beatty was killed in a peculiarly brutal way.²

Still nothing was done. The justices in the district seem to have been afraid to ask for soldiers, knowing that protection would be temporary and retaliation certain. At last, on June 9, on information from the Admiralty to the Secretary of State that the inhabitants of Wapping were living in a state of terror and were removing their goods and families, a detachment of Guards was sent.³ Peace was restored, some of the ringleaders were arrested on June 13, and taken before Sir John Fielding at Bow Street. Several were committed for the attack on Green and the murder of Beatty. At the same time, a number of the older coal-heavers came to Sir John and stated their grievances. He arranged with certain of the masters of ships for their direct employment and payment without deductions, although these declared their

¹ *S. P. Dom.*, *Entry Book* 142, *passim*.

² *Treasury Solicitor's Papers*, No. 2696; *London Sessions Papers*, July 1768; articles in the *Public Advertiser*, evidently by Sir John Fielding, 21st July and 8th August, 1768.

³ *S. P. Dom.*, *Entry Book* 142.

intention of never employing Irish coal-heavers again, but, as a Bow Street Press report said, "it will be difficult to find men so adapted from strength, etc. to execute this laborious task . . . as the Irish are, and as they now see the danger of even going armed [some of the rioters were indicted on the obsolete Statute of Northampton, 1328], it is to be hoped that peace and industry will supply the place of tumult, resentment and mischief."¹ To the Secretary of State Fielding wrote that the disturbances would probably subside, "though it is clear from their stating their case that this body do labour under some grievances which require Parliamentary aid or redress, for they have been tossed about between undertakers, registry office and other interested agents, greatly to their injury."² In July seven men were hung for the attack on Green's house and two for the murder of Beatty. In the same month the office was reopened, in the following April men were working from it, but the undertakers would not employ those that did if they could get others. A petition for legislation in 1769 was unsuccessful,³ but in 1770 the coal-heavers got an Act to replace the ineffectual one of 1758. Undertakers were forbidden to be victuallers, to make deductions from wages on any pretence or to pay in anything but current coin. Disputes were to be determined by the Lord Mayor or an alderman "as disputes between masters and servants in husbandry." Wages were fixed at 1s. 6d. a score, subject to alteration by the Mayor and aldermen in January of each year, but the captain was to be allowed to employ his own men at rates to be arranged between them. The foreman of each gang might stop 6d. in the pound towards the expenses of procuring the Act, which, unfortunately, was for three years only, and at the end of the term was allowed to lapse.⁴

In 1796 the coal-heavers petitioned that they had long been deprived of the benefits of the Act, and "have for several years past laboured under the greatest hardships through the impositions of some of the coal undertakers, who oblige the petitioners to give them part of what they earn in order to obtain employment. . . ."⁵ A Bill was brought in but not proceeded with.

The way in which the coal-heavers were victimised was next brought to notice by Colquhoun, who made a study of river-side labour and of the thieves who systematically plundered ships and wharves, and as magistrate at the Thames Police Office was brought into close contact with the coal-heavers. Shortly after

¹ *Public Advertiser*, 17th June, 1768.

² *S. P. Dom., Entry Book* 106, p. 360.

³ *C.J.*, 20th April, 1769.

⁴ 10 Geo. III. c. 53.

⁵ *C.J.*, 11th February, 1796.

the office was opened in 1798 it was suddenly and violently attacked by a mob of coal-heavers, who swore that the building should be demolished and its inmates killed, because two coal-heavers had been fined under the Bumboat Act for being in unlawful possession of coal. Colquhoun read the Riot Act and fire-arms were used on both sides. Two police officers were wounded, one mortally, and a coal-heaver was shot dead.¹

After this unpromising beginning, the coal-heavers seem to have become reconciled to the existence of the office and were on good terms with the magistrates. Colquhoun, in his book on *River Police* (1800), gave a detailed account of the way in which they were plundered by the undertakers. Each man was supposed to work forty-five ships in a year; the undertakers sent on board each ship 12s. worth of gin and porter a head and charged each man a commission of 1s. 4d. In addition there was competitive drinking to secure employment in slack times. Though earnings were high during the war, in 1800 a pound a day and upwards, the average amount taken home, according to Colquhoun, was not more than 15s. a week.

In 1803, one of the many Acts for regulating the London coal trade forbade victuallers to act as undertakers. This was replaced in 1807 by a more comprehensive Act, thirteen clauses of which related to coal-heavers. No one was to act as an undertaker without an annual licence (costing £1) from the Court of Aldermen on a recommendation from two local magistrates. No victualler was to act directly or indirectly or to provide shovels, baskets, etc. These were to be provided by the master of the ship, who was also to pay 1d. a chaldron to the undertaker in full compensation for his trouble. Wages were to be "really and *bona fide*" paid to the undertaker (if any), who was to divide them immediately among the men. No part of wages was to be paid "by way of barter . . . in any coals, goods, wares, merchandise, meat or drink, lodging or materials for wearing apparel, or in any other matter or thing whatsoever other than current coin." No coal-heaver was to be paid in an alehouse. The Lord Mayor or an alderman was empowered to hear complaints and to suspend any undertaker. Wages were fixed at 3s. a score, and the Court of Aldermen was given power to raise or lower them.² There was the usual clause allowing sailors to unload, which appears to have been an insurance against the recurrence of the events of 1768, but it was stated in 1830 and in 1861 that sailors never did unload, as they were fully occupied with the ship.

¹ *Treasury Solicitor's Papers*, No. 2243.

² 47 Geo. III. c. 68.

Penalties under the Act were recoverable by summary process before a magistrate. Nevertheless it was not effective, except in fixing the rate of wages, which remained unaltered till 1831, when the Act was repealed. A writer on the London coal trade in 1817 even says that the Act had made conditions worse, for it had not lessened the interest of the undertakers with the masters of the ships, while the former arranged with the latter to procure the licensing of deputy undertakers, who usually kept a shop to sell bread, groceries, etc. "Agreeable to the Act, he pays the basket-man at his shop, and, paying him all his demands, they then proceed to the original undertaker's house, where the basket-men generally pay the coal-heavers, though contrary to the Act."¹ These allegations were confirmed in a parliamentary inquiry of 1830. The publican bribed the master of the ship to secure the undertakerage for his man of straw, and recouped himself by a charge on each man of 2s., known as *tow row*, which after the opening of the inquiry masqueraded as a charge for "old score" for liquor. Besides this, each man was forced to pay 2s. a day for gin and beer, and only excessive drinkers, especially those with a score against them, were sure of employment.

The conclusions drawn by the Committee from this evidence were in strict accord with the prevailing economic doctrine. The fixing of wages at 3s. a score "being higher than the present market rate . . . much abuse has arisen in the distribution of the increase. . . ."² Consequently, by the Act of 1831, which replaced that of 1807, the coal-whippers were entirely unregulated, in the belief that wages being left to find their economic level, the abuses of publicans and undertakers would disappear. On the contrary, they became progressively worse. An order in 1838, that the men should be paid on board the vessels,³ did not mend matters, and in 1843 legislation was forced upon Parliament against its economic convictions. The Act was drafted by the City Remembrancer under the instructions of the Corporation,⁴ was introduced as a private Bill and was taken over by Mr. Gladstone. The coal-whippers were active in its support, petitioned Parliament on their own account and obtained signatures to petitions from "the inhabitants of the Tower Hamlets,"

¹ R. Edington, *A Treatise on the Abuses of the Coal Trade* . . . 2nd ed., 1817, p. 41.

² *Report of the Select Committee on the State of the Coal Trade in the Port of London*, 1830.

³ 1 & 2 Vict. c. 101 (local and personal), sect. 12.

⁴ *Minutes of Evidence before the Select Committee on the Coal-whippers' Bill*, 1851.

from "the Port of London" and from "Stepney Union." The shipowners in London and in the northern coal ports, according to their custom, petitioned against the Bill.¹

The Act appears to be based upon the suggestion of the coal-heavers themselves to the Committee of 1830. One of these, asked how he would remedy the abuses, answered, "in my opinion, by regulating an office and by employing men; it is not in paying men, it is in employing them, because if a man does not suffer the imposition he is to have no employ." This was a reversion to the methods of 1758, and the problem to be solved was that of avoiding the merely permissive registration which had wrecked that Act without giving the registered men a complete monopoly. The result was an Act,² accused by its opponents of being a restrictive monopoly, but one whose "every page," according to a supporter, "breathes competition and invites competition."³

It established an office for the registration and employment of coal-whippers under commissioners, four to be appointed by the Board of Trade and four by the Corporation of London. The expenses of the Act and its administration were to be defrayed by a deduction of a farthing in the shilling from wages and the hire of unloading tackle to the masters of ships. The ships might be unloaded by their crews or by the "*bona fide* servants" (*i.e.* men previously employed for at least fourteen consecutive days) of the owner or purchaser of the cargo. Except in these cases all masters of coal-ships were to apply for whippers at the office, where the different gangs were to offer to unload at a certain price and the lowest offer was to be accepted. Should the offers be equal (as in practice they were) the gangs were to be employed in rotation. If the master could not get a gang at the price which he offered he was to be allowed to employ non-registered men, but was not to pay them more than the rate offered by the office gangs. There was also a provision allowing for the use of machinery.

The Act gave complete satisfaction to the men, who were at last able to establish the pension fund they had so long desired. It was a temporary Act, at first for three years, and in 1846 all the registered coal-whippers signed a memorial to the Commissioners, thanking them for

"their gratuitous and truly benevolent exertions to better their condition, for their release from a system that made

¹ *C. J.*, xcviii. pp. 456, 465, 515, 521, 551.

² 6 & 7 Vict., c. 103 (local and personal).

³ *Minutes of Evidence* . . . [1851].

them paupers, and for carrying fully into effect the kind intentions of the legislature to emancipate them from a state that degraded them physically and mentally, that made them a terror to the neighbourhood in which they dwelt, the destroyers of the peace of their families, and bad examples to their children. . . . Your memorialists further state that great improvement has taken place in the habits of the men at present under your control; that peace and happiness has taken the place of discord; that the appearance of coal-whippers before the magistrates of the district is now of rare occurrence; that the men whose name was once a byword and reproach have, through the influence of the present equitable system, in a great measure removed the prejudice against them, and have relieved the parishes in the neighbourhood of a great burden, and are now not only anxious to provide for their present exigencies, but in successfully establishing an extensive Benefit Society, whose object is to provide for their necessities in sickness and to bury the dead, and preserve them from being dependent on the bounty of others, have become, what they never could be under the old system, good and useful members of society." They entreat the Board to impress on the Government the necessity for renewing the Act: "Your memorialists, having tasted the blessing of freedom from the degrading truck system, are now unfitted to resume their former degraded position; and, from the well-known hostility of their former employers, they would assuredly in that case be reduced to a far worse state (if possible) than that from which they had been rescued; confusion would ensue, strikes would unavoidably be frequent. . . ." ¹

The Act was renewed, with certain amendments, for five years, and in 1851 for a further five years. It had been much opposed as contrary to sound doctrine, and passed "because the stern principles of political economy must sometimes yield to the cry of misery and considerations of humanity." ² In 1856 it was allowed to lapse on the ground that it was no longer necessary, having delivered the men from "a state of squalid poverty and almost hopeless demoralisation." The shipowners had always been opposed to it, they complained of delays and disliked the office. The Government agreed to the dropping of the Bill for renewal on the shipowners signing an agreement themselves to establish an office for the engagement of the men and never to hire men from, nor pay wages at, any public-house. They further undertook that if this engagement was broken in letter or in spirit they would not oppose the renewal of the Act. An opponent of

¹ *Parliamentary Papers*, 1846, XLIV, p. 99.

² *Hansard*, 3rd series, Vol. 70 (Debate of 17th July, 1843).

renewal admitted its original justification, but saw no necessity "for sanctioning the continuance of a law which went to perpetuate a Trades Union, with all the evils which combinations of that kind necessarily have."¹

As a matter of fact, the coal-whippers seem strangely remote from nineteenth-century trade-unionism—organisation, aims and mentality date rather from the eighteenth century, if not from the sixteenth or earlier. The language of the petition of 1846 is curiously reminiscent of the petitions of 1758, of 1762, 1764, 1769, 1770 and 1796. The men had always been ready for a rather rigorous discipline from an outside authority—probably because they were the chief sufferers from the disorders, fights and sudden strikes which were not effectively checked till the Act of 1843, under which delinquents were reprimanded by the Commissioners, punished by suspension, and in extreme cases by expulsion from the office and its advantages. The authoritarian management under which the men were not allowed to gang themselves (on the contrary, care was taken to mix Irish with English) was not resented. It is abundantly clear from the evidence given to the Committee of 1851 on the Coal-whippers' Bill (renewal) that the office was loyally supported by the men and that both Commissioners and office staff—though careful not to risk an accusation of restricting labour or interfering with wages—regarded themselves as protectors of the men's interests. Hence probably the resentment of a certain type of employer as expressed by a coal merchant who, when asked if he could make any suggestions for the improvement of the office, answered, "We want the men to be servants, not masters, which they are now," an assertion certainly not borne out by the general tenor of the evidence.

On the other hand, some employers approved of the Act and considered it a benefit to the trade. Mr. Charrington, for instance, said that it had stopped the strikes and checked the drunkenness and riot which were so frequent before 1843, to the great pecuniary advantage of the community; "I consider that it is framed as well as any Act can possibly be, not to interfere with the principles of political economy or the freedom of labour, and that it does so act, and that there is as great an opportunity for competition as if the restrictions (so called) were done away with altogether." But the theorists remained convinced that the Act was restrictive and therefore must be against the true interests of all parties. When the clerk of the Thames Police Court, with forty years' experience of the district, stated the great improvement in the

¹ *Hansard*, 3rd series, Vol. 142 (Debate of 19th June, 1856).

conduct of the men, he was asked, "Are you not aware that it is a restrictive Act? . . . Do you not consider that any restriction upon labour must be rather calculated to increase the business of your Police Court?" and answered ". . . instead of its increasing the business . . . it has rather diminished it."

It is clear that in 1851 the number of the men in relation to the work had increased rather than otherwise, and that the proportion of the work done by registered gangs (then estimated at 75 per cent.) was tending to decline owing to changes in the methods of unloading coal and a growing number of *bona fides*. Changes were due to improved wharf facilities enabling coals to be "backed" or taken straight from the collier to the wagon without the intermediate process of being whipped into a barge. The colliers were still sailing vessels and machinery was only just beginning to be tried. In 1851 one "floating steam engine," with a staff of an engineer and five whippers, which was placed on the decks of colliers, had been working for two or three months, but was still said to be in an experimental stage, and though it had recently unloaded a ship of 400 tons in three days, its superiority over the old method had not been established. The transshipment in the Pool of coal for export from colliers to "great ships" of 1200 tons or so was substantially a new process since 1843, and though whippers were employed, there were complaints that the process was unsuitable and that the men took advantage of the need for haste to demand dispatch money.

Wages had fallen since the Act, and since the days of the statutory rate, abolished in 1831. A rate of 3s. per man per score, according to the new method of calculation,¹ by which a ton was estimated at five-sevenths of a London chaldron, was equivalent to a gang rate of 11½d. per ton (each man receiving one-ninth). Between 1831 and 1843 strikes had been frequent and variations wide, one witness says from 7d. to 11½d., another from 6d. to 1/1½d., but the extremes may be taken as exceptional, and it is to be noted that the variations were less wide than in the eighteenth century. After the Act the rate was more or less stable at 9d., and in 1849 was reduced to 8d. by an agreement between the whippers and the coal-factors on behalf of the owners, that if the reduction was made the registered whippers should have the whole of their work, an agreement which the owners had failed to keep. In 1851 the rate was still normally 8d., though in exceptional circumstances 4d. had been taken. The owners complained that

¹ The measurement of coal in the Port of London was altered by 1 & 2 Wm. IV. c. 76 from the chaldron to the ton.

the office kept the rate at 8*d.* when, if outside labour could be freely employed, it would fall to 6*d.*, a price they considered reasonable in view of the fall in freights (said to be 40 per cent. since 1843) and in the cost of living.

Until 1843 these rates had been subject to heavy deductions. It is a curious fact that statements as to the net weekly wage vary little. In 1800, when three pounds or more a week was earned, 15*s.* according to Colquhoun was the amount taken home. In 1830 "a constant man" would earn 25*s.* 3*d.* and take home 16*s.*, and a coal-whipper stated that out of earnings of £1 a man could not expect to take home more than 11*s.*—"not if he intended to obtain work at that house again." In 1851 average earnings were said to be 16*s.* 8½*d.* a week, a rate which, though not questioned, is inconsistent with the statements of a coal-whipper that the average pay per hour was a shilling, and that rather less than four days a week were worked of from seven to eight hours a day, though occasionally from twelve to fourteen hours a day were worked. A gang would unload from fourteen to sixteen tons in an hour. The amount of employment also seems to have varied little. In 1769 the men represented that though their pay was high, they were not employed, on an average, more than three days a week.¹ In 1830 a "constant man" with the best chance of employment, said he worked four days a week. In the war, when earnings were so high and the rate of pay the same as in 1830, slack times were probably reduced to a minimum.

How labour was recruited before 1843 is not clear. Until the introduction of whipping the difficulty of the work and the large size of the gangs probably enabled the coal-heavers to control the admission of new-comers. After this, the admission of new gangs became a question over which blood was shed. After 1843, admissions were regulated by the registrar under by-laws made by the Commissioners and approved by the Board of Trade after having been submitted to the coal trade. By the Act he was required to register every applicant at a fee of 4*d.* Super-numerary, untrained men were registered as candidates, so that besides some 2000 registered whippers there were from 1000 to 2000 men waiting for admission to a gang. The number was very fluctuating, as in summer many went off harvesting or brick-making. Normally they were admitted in rotation after having been registered about four years. When a vacancy occurred the two men next on the list who answered to their names were set to do the work of one experienced man, dividing one man's pay.

¹ *The Case of the Coal-Heavers* . . . [1769].

One held the basket, the other steadied it, so that the work of the gang was not delayed. After having worked in couples for twenty days they were considered to have learnt the work and to be qualified whippers. This was the custom of the trade, ratified by a by-law, but whether the men so trained were necessarily ganged at once is not clear. The evidence of the registrar on the point is contradictory, and he seems to have been evading a possible charge of restricting the freedom of labour. He stated, however, that should there be a greater demand for gangs than the office could satisfy, he should supply men from the registered candidates.¹

Another instance of the curiously stable character of the occupation is that the proportion of Irish to English seems to have varied comparatively little. In 1768 the Irish had been "two-thirds or more," in 1851, half were said to be Irish, a quarter English, and a quarter mixed Irish and English. The turbulent gratitude of the men to Justice Hodgson in 1768 for taking their part had its counterpart in 1848, when, as a thank-offering to the Government for the Act of 1843, the coal-whippers to a man were sworn in as special constables to deal with the disorder expected from the great Chartist meeting—a contrast with 1768, when the coal-heavers' rallying cry had been "Wilkes and Liberty."

M. DOROTHY GEORGE.

¹ *Minutes of Evidence* . . . [1851]. On only one day, however, since 1843 had all the gangs been employed.

THE LAST YEARS OF THE IRISH CURRENCY

It is exactly one hundred years since the Irish currency ceased to exist, and it may not be without interest, on the centenary of its disappearance, to recall some of the circumstances of its passing away. The precise date at which that scale of monetary valuation which was afterwards known as the Irish currency first came into existence is not very clear. In the opinion of some authorities, the value of the Irish penny was fixed in the reign of James II, while others prefer to date that event in the reign of William III. There is no need for us to engage upon any controversy about the matter, as the precise date is of no consequence except to the antiquary; it is sufficient for our purpose to know that the value of the Irish penny was fixed in the closing years of the seventeenth century at one-thirteenth part of a shilling, in contrast with the English penny, which was one-twelfth.¹

The whole Irish currency was based upon this depreciated penny. The English pound and the Irish pound both contained 240 pence, but the pence in the two cases were of different values. Starting from the basis that the Irish penny was worth twelve-thirteenths of the English, it is easy to calculate that the Irish pound was worth only 18s. 5½d. English, and that the English pound was worth £1 1s. 8d. Irish. The latter was the rate at which English gold and silver circulated in Ireland, where its value as money of account was 8½ per cent. higher than in England. The difference between the two currencies was really nothing more than a difference of accounting; the standard of value was the English pound, which, however, did not circulate.²

The rate of exchange between England and Ireland corresponded with the respective values of the pound in either country, and the par was therefore called 8½ per cent. So long as gold remained the standard of value in both countries the exchange could move on either side of this figure only within the so-called gold points. And so, in fact, we find that throughout the

¹ Palgrave, *Dictionary of Political Economy*, art. "Irish Currency."

² Macleod, *Theory and Practice of Banking*, 3rd ed., Vol. II. p. 8. *Explanatory Memorandum on Irish Currency: Parliamentary Papers*, 1868-9, Vol. 35, Part II. p. 379. Evidence of Mr. Robert Culley before *Royal Commission on International Coinage: Parliamentary Papers*, 1867-8, Vol. 37, p. 109.

eighteenth century the Irish-English exchange fluctuated in the close neighbourhood of this figure, with one notable exception in the years 1753-4, when it rose nearly 3 per cent. above par. At that time there was an unusually extensive issue of paper notes circulating in Dublin, and, as soon as the exchange reached this abnormal figure, there was a financial panic, and, in the frantic rush to convert the paper into gold, all the banks in Dublin except two failed. There followed a total annihilation of the bank paper and a speedy restoration of the exchange to its normal figure.¹

The year 1797 is well known as the date of the Bank Restriction Act. In spite of the fact that the exchanges were favourable to Ireland and that there was plenty of gold in Dublin, the Government, prompted by a mania for uniformity between England and Ireland, passed a similar act relating to the Bank of Ireland.² No precise figures are available of the amount of notes issued by the Bank of Ireland during the next few years; but we know that it increased from about £600,000 in 1797 to £2,986,999 on the 1st January, 1804, while the issue of the Bank of England increased during the same period from 10 to 17 millions. The increased issue in Ireland was thus relatively very much greater than in England. The same period witnessed a complete revolution in the Irish exchange. Hitherto, as we stated, the exchange had always fluctuated around the par of 8½, but it now began to move far beyond the limits within which it had formerly been confined. The following table shows the average exchange of Dublin on London during this period:³ In January 1804 the exchange reached the altogether abnormal figure of 18 per cent.

This unusual state of the exchanges attracted considerable attention both in Parliament and in the country. In the House of Commons on 6th December, 1803, Lord Archibald Hamilton

¹ Foster, *Essay on Principle of Commercial Exchanges*, pp. 174-5. *Report of Select Committee on Circulating Paper, etc.*, 1804, Appendix A 2.

² 37 Geo. III, c. 51, Irish. Andreades, *History of the Bank of England*, p. 214.

³ *Report of Committee on Circulating Paper, etc.*, 1804, Appendix A 1.

	£	s.	d.
1797	6	6	10
1798	8	8	5
1799	10	12	3
1800	10	7	4
1801	12	3	2
1802	11	3	3
1803	13	19	0
1804 (Jan.-March)	16	3	7

called attention to the state of the exchange and expressed the view that the Bank had abused its right of issue; and on 13th and 20th February, 1804, there was a full-dress debate on the subject.¹ In the House of Lords the matter was discussed on 5th March, 1804, when Lord King gave expression to the views which he had already stated in an important pamphlet to which we shall presently refer.² Meanwhile the House of Commons, on Mr. Foster's motion, had appointed a Select Committee to inquire into the subject.³

The interest that was taken in the exchange at this time is shown by the number of pamphlets dealing with it that were published. Here, as in Parliament, two schools of thought emerged: that which attributed the state of the exchange to the adverse balance of remittances, and that which attributed it to the depreciation of Irish bank paper. The former school paid much attention to the real state of Ireland's international indebtedness; and, while admitting that the trade balance was favourable to Ireland, attempted to prove that the value of external remittances was adverse owing to the increase of absenteeism and the raising of loans for Irish purposes in London. In other words, the discussion turned on the value of the invisible imports and exports, although, of course, those terms had not yet been coined. The adverse balance of remittances, it was urged, augmented the demand for means of payment in Ireland, and this demand was met by the creation of bank paper. The increased note issue was thus the effect and not the cause of the adverse exchange, and, far from being an evil, was the one thing that stood between Ireland and national bankruptcy. The undeniable fact that the value of the Bank of Ireland note was lower than that of the guinea was to be accounted for not by the depreciation of the former, but by the appreciation of the latter, which was bought and sold in Ireland like any other commodity. The remedies proposed by the writers of this school were aimed at redressing the adverse balance of remittances, either by encouraging exports and discouraging imports, or by creating credits in England upon which the Bank of Ireland could draw from time to time.⁴

¹ Cobbett's *Parliamentary Debates*, Vol. I. pp. 1082, 1101.

² *Ibid.*, p. 697.

³ *Ibid.*, p. 649.

⁴ *A Letter to Lord King in Defence of the Conduct of the Banks of England and Ireland*, by Henry Boase, London, 1804. *The Real Causes of the High Rate of Exchange and the Only True Remedy*, Dublin, 1804. *Observations on the Exchange between London and Dublin*, by a Merchant of Dublin, Dublin, 1804. *A Letter from an Irish M.P. upon the Report of the Select Committee on Circulating Paper*, London, 1805. Somewhat similar views are expressed in an anonymous pamphlet

The protagonist of the other school was Lord King, whose pamphlet entitled *Thoughts on the Restriction of Payments in Specie at the Bank of England and Ireland* appeared in 1803. This writer was concerned primarily with the alleged depreciation of the Bank of England paper, and referred to the Irish exchange merely in corroboration of his conclusions on that subject. Having argued that the unfavourable state of the London-Hamburg Exchange was the result of over-issue of notes by the Bank of England, he proceeded to point out that there were only two exceptions to the unfavourable exchange which had prevailed between London and the Continent since 1799, namely, the exchanges on Lisbon and on Dublin. Both Portugal and Ireland had greatly augmented their paper issues during these years, and the same cause had therefore produced the same effect in the two countries. In proof that the Irish currency was, in fact, depreciated, Lord King pointed to the premium on the sale of guineas and to the excessively unfavourable exchange, and concluded that "the history of commerce does not afford a single instance of so great an irregularity in the exchange between any two countries except in the case of a depreciated currency." By way of remedy, he suggested that the Bank of Ireland should be deprived of the right of unlimited issue and should be bound to pay its notes in Bank of England notes on demand.

The same case was made by Henry Parnell in a singularly lucid pamphlet.¹ Parnell begins by pointing out the close relation that exists between over-issue and depreciation in the case of a paper currency. He then discusses the question of the alleged depreciation of Bank of England paper, and concludes that "whatever difference of opinion may have existed relative to the question as it affects the currency of England, there is no doubt that the currency of Ireland, as composed of Bank of Ireland paper, has suffered a most serious depreciation caused by an excessive issue of the Bank paper by the directors of the Bank of Ireland." Regarding the provision of a remedy for this evil, the author discusses the possibility of limiting the amount of

probably written by Wm. Jebb entitled *An Enquiry into the Depreciation of Irish Bank Paper: Its Effects and Causes and a Remedy Proposed*. This writer admitted that Irish bank paper was depreciated, but contended that the depreciation was caused by the adverse balance of remittances. He allowed, however, that "an excessive increase of the issue of paper must tend to increase the evil," and was of opinion that the best remedy for the unsatisfactory state of affairs would be the introduction of a large number of English notes into Ireland.

¹ *Observations upon the State of Currency in Ireland and upon the Course of Exchange between Dublin and London*, by Henry Parnell, Dublin, 1804.

the issue, but decides against this course as being "of a nature too hazardous and a restriction upon trade too grievous"; and finally recommends the amalgamation of the British and Irish currencies and the imposition of an obligation on the Bank of Ireland to pay its notes with Bank of England notes on demand.

John Leslie Foster followed on the same side. In his pamphlet¹ he demonstrates that the unfavourable exchange had exceeded both the limit of time and the limit of amount possible for an adverse exchange caused solely by an unfavourable balance of remittances, and must therefore be the result of some other cause. He then proceeds to enumerate the symptoms of a currency depreciated by excess as follows: "First, a high and permanent excess of the market price above the mint price of bullion; secondly, an open discount upon paper as compared with coin; thirdly, an exchange unfavourable to the country when computed in bank notes, yet possibly favourable when computed in specie; unfavourable in those parts of the country where the circulating medium is paper, yet possibly favourable, or at least much less unfavourable, to other parts whose circulating medium is specie; fourthly, an exchange between different parts of the same country where circulating media are different; fifthly, the entire disappearance of all the smaller coins which had been in circulation along with specie, but which cannot continue in circulation along with any other circulating medium of less value." He had no difficulty in showing that all these symptoms of depreciation existed in Ireland, from which he drew the indisputable conclusion that depreciation had, in fact, taken place. By way of remedy, Foster favoured the proposal that the Bank of Ireland should be bound to pay its notes on demand in English notes.²

The third and fourth class of symptoms mentioned by Foster call for a few words of explanation. At the time of the passing of the Bank Restriction Act the activities of the United Irishmen were in full swing in Ulster, where considerable disaffection against

¹ *An Essay upon the Principle of Commercial Exchanges*, London, 1804.

² The effect of the depreciation of the Bank paper on the exchange was fully appreciated by the anonymous author of *A Word of Advice to the Trading and Monied Interests of Ireland upon the Momentous Subject of the Alarming Scarcity of the Smaller Denominations of Silver Coin*, Dublin, 1804; and by the Earl of Lauderdale, who wrote two pamphlets on the subject entitled *Hints to the Manufacturers of Great Britain on the Consequences of the Irish Union*, and *Thoughts on the Alarming State of the Circulation in Ireland*, both published in Edinburgh in 1805. The excessive issues of private banks is suggested as the cause of the adverse exchange in *A Candid Cobbler's Cursory and Critical Conjectures upon Exchange and Small Change*, etc., Dublin, 1804. This was, of course, absurd, as all private issues were payable on demand in Bank paper.

the Government prevailed. It was widely thought in the north that to refuse to accept Bank of Ireland paper would embarrass the authorities in Dublin, and the result was that specie continued to circulate in Ulster long after it had disappeared from other parts of Ireland.¹ The existence of the sounder currency had its natural effect on the exchange, and for several years the exchange from Belfast on London was more favourable than that of Dublin on London. In Newry, where the two currencies met, two rates on London, the specie rate and the paper rate, were quoted.²

The simultaneous existence of two rates of exchange from different parts of the same country was obviously a most unusual occurrence. It gave rise to the extraordinary feature of a rate of exchange from Dublin on Belfast. Foster says that such an exchange existed all during the period that the English exchange was unfavourable to Dublin³ and the same fact is attested by Lord King⁴ and by Henry Parnell.⁵ As one approached the north from Dublin, one found it more and more difficult to induce shopkeepers and others to accept Dublin banknotes or silver tokens, and when one passed further north than Newry such notes and coins were practically everywhere refused.⁶ Throughout Ulster two prices were quoted for commodities, the gold price and the paper price.⁷ A good deal of hardship was caused to the weaker members of the community by this double currency, because the economically stronger members, such as landlords, agents and tithe proctors, contrived to be paid in gold and to pay their own wages and tradesmen's bills in paper.

One would have thought that the phenomenon of the Dublin-Belfast exchange would have been accepted as a final proof of the relation between the over-issue of Bank of Ireland paper and the state of the English exchange. Between Ulster and the south of Ireland there could be no question of balance of trade or balance of remittances; and yet it appeared that the area where the Bank of Ireland paper circulated suffered from an adverse exchange on the area where specie was still in circulation. Indeed, in view of the fact that the Belfast-London exchange was actually favourable, it was possible to infer, as Foster pointed out,⁸ the depreciation not only of the Irish but of the English bank paper. Currency theory was, however, at that

¹ Parnell, *op. cit.*, p. 24.

² *Report of Committee on Circulating Paper, etc.*, 1804, Appendix M.

³ *Op. cit.*, p. 123.

⁴ *Op. cit.*, p. 49.

⁵ *Op. cit.*, p. 25.

⁶ Jebb [?], *op. cit.*, pp. 16-17.

⁷ Foster, *op. cit.*, p. 12 n.

⁸ *Op. cit.*, p. 128.

time comparatively undeveloped, and a very large and respectable body of opinion still continued to attribute the unfavourable exchange to the adverse balance of remittances.

The widespread prevalence of this erroneous opinion was clearly shown by the evidence given before the Select Committee of the House of Commons, to the appointment of which we have already referred.¹ The Committee, however, showed great independence of mind and arrived at conclusions opposed to the views urged upon it by the majority of the witnesses whom it had heard. It found that the real balance of remittances (including, as we would say to-day, all the invisible items) was in favour of and not against Ireland, and that, therefore, if this were the deciding factor, the exchange should also be favourable to Ireland. Some other factor must consequently be sought for, and this, in the Committee's opinion, would be found by examining the paper issues of the Bank of Ireland. Prior to 1797, it was pointed out, the exchange had been regularly favourable to Ireland, whereas since that date it had been uniformly adverse. Was this a case of *post hoc* or of *propter hoc*? The Committee had no hesitation in deciding that the Bank had abused its privilege by a serious over-issue, as a result of which the Irish currency had become depreciated and the exchange rendered unfavourable. The depreciation had the effect, in the Committee's own words, of "enhancing the price of all the necessaries of life and of all manufactures, encouraging the circulation of base and counterfeited metal, and driving out of circulation what little good silver had been in it; and above all, of keeping up high and unexampled rates of exchange against the kingdom."²

The only complete and lasting cure for the evil state of affairs was the repeal of the Bank Restriction Act, but the Committee dismissed this course as not immediately practicable. The union of the Banks of England and Ireland was also pronounced impracticable. The Committee was strongly in favour of making Bank of Ireland notes payable in notes of the Bank of England, and made suggestions as to the way in which a fund might be created in London upon which the Bank of Ireland could draw. The loans about to be raised in England for Irish purposes were indicated as a "ready, adequate and effective fund" for this purpose. The Committee recommended that these loans should be managed by the Bank of Ireland instead of the Treasury, and

¹ *Report from the Committee on the Circulating Paper, the Specie and the Current Coin of Ireland; and also on the Exchange between that Part of the United Kingdom and Great Britain*, reprinted in *Parliamentary Papers*, 1826, Vol. 5.

² *Report*, p. 9.

that immediate measures should be taken with the Bank of Ireland for the purpose. The Bank of Ireland should be empowered to invest in the Bank of England whatever surplus of specie it had in its coffers over and above what it was allowed by law to issue and what a due consideration of the circumstances of Ireland might show it necessary or prudent to keep. Other means suggested for aiding the Bank of Ireland to create funds in London to draw upon were the empowering of the Government to issue Treasury bills to the Bank not to be made use of except when necessary to support the latter's credit, and the enlargement of the Bank's capital. The issue of paper by private bankers should be controlled by a strict enforcement of the laws relating to registration and stamp duties. The Committee expressed the belief that these measures would soon restore the exchange, provided, of course, that the Bank directors did not again make an over-issue of paper, and regulated the issue by the same principles as if no restriction of cash payments existed. The Report concluded by recommending that, as soon as the exchange became restored to par, the currencies of England and Ireland should be amalgamated, and the old Irish penny abolished.¹

This Committee, which included many of the leading statesmen of the day, was the first body of its kind ever appointed by the British Government to make an inquiry into the paper currency.² In 1810 the Bullion Committee presented its Report, which has become deservedly famous and ranks as a classic in the literature of finance. Yet the earlier Irish Report "dealt with similar facts, stated the same theories, and drew the same conclusions" as the later and more famous Report of the Bullion Committee.³ The fact that one Report dealt with Ireland while the other dealt with the infinitely more important matter of the British currency probably accounts for the obscurity of the former and the fame of the latter; but there is no gainsaying the fact that the just and indisputable doctrines embodied in the Report of the Bullion Committee were all to be found, though possibly not so elegantly expressed, in the Report of 1804.

Several of the recommendations of the Committee were tardily followed. The Irish Treasury announced that, after the 3rd of December, 1804, it would draw on London for all sums over ten pounds at the rate of $11\frac{1}{2}$ per cent. as long as the available

¹ *Report*, p. 14.

² Macleod, *Theory and Practice of Banking*, Vol. II. p. 9. Andreades, *History of the Bank of England*, p. 214.

³ Andreades, *op. cit.*, p. 220.

fund remained unexhausted.¹ In 1805 the issue of notes for sums under one pound was forbidden, and in 1808 the Bank of Ireland was authorised to increase its capital by a million pounds and was entrusted with the management of the public debt.² The act which provided for the consolidation of the British and Irish Exchequers provided that as from the 5th January, 1817, all Treasury and revenue accounts should be stated in British currency.³

The publication of the Committee's Report seems to have influenced the directors of the Bank of Ireland. Between January 1804 and January 1806 the note issue was gradually reduced by 20 per cent., and all silver tokens were suppressed. The Irish exchange was restored to par, and was in favour of Ireland in 1809. The time had now arrived when the Committee's most important recommendation, namely, that the currencies should be assimilated, could be carried into effect. A motion in favour of this course was proposed by Mr. Parnell, but was negatived without a division.⁴ The Bank afterwards relapsed into evil ways, and the exchange during the years 1812-15 was once more in the neighbourhood of 18 per cent., having on one occasion touched 20 per cent. In the years 1816-19 the circulation was gradually reduced in anticipation of the cessation of the Restriction Acts.⁵ Provision was made for the resumption of cash payments in 1819,⁶ and thenceforth the exchange, during the few remaining years of its existence, was anchored in the neighbourhood of par.

The work of the framers of the Act of Union was finally completed in the decade 1816-26. The consolidation of the Exchequers and the abolition of the Union duties took place between these years, and it was impossible at a time when the passion for assimilation and uniformity were so strong that the Irish currency would be permitted to survive. An Act of 1825⁷ provided that as from the 1st January, 1826, the English system of currency should prevail in Ireland. The change was carried through with very little inconvenience or friction. The Bank of Ireland had

¹ Lord Lauderdale, *Hints to the Manufacturers of Great Britain on the Consequences of the Irish Union*, Edinburgh, 1805.

² 45 Geo. III, c. 41; 48 Geo. III, c. 103.

³ 56 Geo. III, c. 98, s. 26.

⁴ Cobbett, *Parliamentary Debates*, Vol. 14, p. 75. Report of Bullion Committee, 1810.

⁵ Evidence of Mr. Culley before the *Royal Commission on International Coinage*, 1868, pp. 104-5; Kelly, *The Universal Cambist*, 1821 ed., Vol. I. p. 195.

⁶ 59 Geo. III, cc. 49 and 99.

⁷ 6 Geo. IV, c. 79.

to alter all its balances and all the balances standing to the credit of parties in the Government funds, and all unpaid and unclaimed dividend dockets that had accumulated for twenty or thirty years. So expeditiously was this gigantic accounting operation performed that every holding in the public funds and every current account was balanced in the new currency on the very day that the change took place.¹

Among the mercantile and trading classes the change was scarcely felt and all the necessary adjustments were made in two or three days. Among the working classes there was a little difficulty, because retail prices were not immediately adjusted, and the working man found that he did not get any more for his 3*d.* or 4*d.* British than he had got for his 3*d.* or 4*d.* Irish. In small retail transactions the shopkeeper naturally had an advantage over his working-class customers, but any maladjustments or injustices that were experienced disappeared within twelve months. The people clung to the old coins with which they were familiar so tenaciously that on July 12th, 1826, a proclamation was issued declaring that the old copper money should thenceforth be current at the same rate of twelve pence to the shilling. The willingness of the people to use the new currency was stimulated by the issue of a new and brilliant coinage from the mint.²

GEORGE O'BRIEN

¹ Mr. Culley's evidence in *loc. cit.*

² Evidence of Mr. Culley in *loc. cit.* : *First Report of Decimal Coinage Commission*, 1857, Appendix No. 17. *Final Report of Decimal Coinage Commission*, 1859, evidence of Sir Richard Griffith, p. 90.

THE ORIGIN OF COTTON FUTURES

THE legend of the magic birth of cotton futures at the close of the American Civil War is long in dying,¹ and it is time, perhaps, for the early history of the futures market to be stated as faithfully as available records permit. The story centres round the improvements in means of communication which were adopted in the middle of the nineteenth century; it is crammed into a period of less than twenty years and is necessarily replete with incident. So long as cotton and news travelled across the sea at the same pace there could be no volume of dealings except in cotton on the spot. But as soon as the mail steamer, carrying letters and samples, outstripped the sailing ship with its cargo of cotton, that cargo could be bought and sold while still at sea. The gradual extinction of the sailing ship would have eliminated the time interval which made that practice possible, but in the meantime the telegraph came to magnify and perpetuate the difference between the transmission of news and the shipment of cotton.

Therefore there are several phases of development: the coming of the mail steamer; the inauguration of telegraphic communication between New York and Halifax, where the steamer from England first touched; and between New York and New Orleans, the chief cotton market of America; the gradual extension of the cable service between England and India; and, finally, the successful completion of the Atlantic cable.

The existence of a market in "transit" or "arrival" cotton at New York dates at least from 1851.² Its development was due to the rapidity with which news could be transmitted, as compared with the slower movement of goods, and to the special facilities possessed by New York for turning that situation to its advantage. The shipment of cotton was slow, the waiting of the sailing vessel for its full complement only less tedious than its voyage across the Atlantic. On the other hand, the mails were now carried by steamer, and, since the steamer touched first at Halifax, telegraphic communication both with

¹ Cf. W. H. Hubbard, *Cotton and the Cotton Market*, p. 204; E. Brown, *Marketing*, pp. 274-5.

² *Economist*, Nov. 29, Dec. 6, 1851.

Halifax and New Orleans made the New York market the most sensitive to any changes affecting either demand or supply. Dealings in cotton "to arrive" or "in transit" represented a gain in mutual advantage to the Northern merchant and the Southern shipper—the one was able to make use of his information and the judgment based upon it; the other was enabled to rid himself of risks which would otherwise have hung upon him until the cotton was sold at Liverpool or elsewhere. The arrangements were simple: when cotton was loaded, samples were sent to New York and there offered for sale on the owner's guarantee that the bulk would agree with the sample. If the offer was not taken up in New York the cotton went forward to its European destination on the owner's account. And this system grew out of the still simpler process of selling in advance cotton that was actually shipped to New York from the Southern ports.

Although Liverpool was acquainted with the nature of this business on the New York market, there seems to have been no hurry to copy it. This for a twofold reason: Liverpool did not possess the same opportunities as New York, for the interval between the market and the sources of supply was too great; and the innovators of such methods were pure speculators whose practices were frowned upon by the more reputable merchants and brokers. Nevertheless, events conspired to bring about, even at Liverpool, an extraordinary increase of dealings in cotton "to arrive." The partial development of telegraphic connection with India just preceded 1857, the year of the American panic and of the Indian Mutiny, and gave to a demoralised cotton market new facilities for speculation. The year began with a prospect of short supplies of cotton from America which led to large sales of East Indian cotton still at sea. A great proportion of this cotton came on the market in the autumn when the panic was at its height; the purchasers were unable to re-sell the cotton or to negotiate advances, and it was eventually forced off on a depressed market at ruinous prices.¹ It was a salutary lesson for the speculators and their interest waned. "Whether it is from the little encouragement which they have had of late," runs a broker's circular of 1859, "or that their recollections of the panic of 1857 are still too vivid, it is difficult to say, but speculators in cotton to any extent do not exist, and the machinery through which they operated appears to be out of order."² On the other hand,

¹ Haywood and McVicar's Circular, Dec. 31, 1857.

² Thornely and Pownall's Circular, Dec. 30, 1859.

the American Chamber of Commerce in Liverpool had already found it necessary to issue the following statement :

“Whereas the Sales of Produce ‘to arrive’ involve risks other than those incurred in the ordinary course of business,

It is unanimously resolved—

‘That in Sales “to arrive” of Cotton or other Produce from the United States, the Seller does not agree to guarantee such Sale unless he decides to deliver the Goods upon their arrival to the Buyer of the same.’ ”¹

This action is of some significance, because the acceptance of the principle of buying back arrival contracts was necessary to the later birth of “hedging.”

During the lull in speculation, more direct telegraphic contact with India was established. An interested broker comments thus : “On 10th June the Wires worked from Aden and on the 26th November Liverpool had news from Bombay of 12th November—thus the Telegraph makes constant progress thitherwards.”² The way was open to the far greater wave of speculation which marked the period of the American Civil War.

From 1861 the mania for gambling in cotton grew with cumulative rapidity. The current price of East Indian cotton in 1860 was from 4*d.* to 5*d.* per lb., and of American from 7½*d.* to 8*d.*; while speculation proceeded in 1863 on a basis of 30*d.* for American and 25*d.* for East Indian. Small wonder that the anticipation of larger and larger profits drowned any fear of a sudden decline in prices. The purchase of cotton “to arrive” had hitherto been confined to that already shipped or about to be shipped. Now, however, the continued prospect of soaring prices induced the buying of cotton for shipment in distant months. During the last months of 1863 parcels were bought to arrive during the first six months of 1864.³ Even more reckless did the operators become in 1864 when the mania reached its highest pitch.⁴ The inevitable reaction took place in the autumn, a reaction stimulated by rumours of peace from New York, by very large arrivals of cotton which had been bought at extravagant prices, and by the stringency of the money market, in which a discount rate of 9 per cent. ruled. In consequence, there was a rapid drop in prices of 6*d.* to 7*d.* per lb. within three weeks,

¹ Stolterfoht, Frost & Co.’s Circular, March 26, 1858.

² Samuel Kearsley & Co.’s Circular, Dec. 30, 1859.

³ M. Williams, *Seven Years’ History of the Cotton Trade of Europe* (Liverpool, 1868), p. 51.

⁴ *Ibid.*, p. 69.

which, in spite of a later recovery, had the effect of quietening the speculators and minimising their activities for several months. With the conclusion of the war, business tended to return to a more normal basis. Distant deliveries were well enough so long as cotton might profitably be unloaded on the market no matter what its quality, but with more exact requirements to be satisfied the previous system made a reappearance, by which cotton was sold which was about to be cleared or actually afloat, so that the ship could be named, the quality guaranteed, and the marks given.

In August 1866 the Atlantic cable was successfully laid, and market methods had to be adjusted to the new conditions. The first effect was to increase considerably the amount of buying and selling afloat, sufficient evidence of which is given by the publication from that time onwards of a daily report on the arrival market in American and Indian cotton. The second result, the growth of trading in forward deliveries, came more slowly and was prompted not only by the realisation of the closer union of the English and American markets, but also by the poverty-stricken condition of the South.¹ During 1867, alongside the dealings in arrival cotton there came a considerable degree of trading for shipment or future delivery. For a time this implied nothing more than the older business of selling cotton to arrive in near months, save that what was formerly done recklessly and ignorantly was now done deliberately and advisedly; the rapid conveyance of information maintained a proper relationship between "spot" and "future" prices, and the sale was made on the basis of an agreed quality.

New York adjusted itself more rapidly than Liverpool to the new position. New York was already infected by the new methods of trading emanating from the Chicago grain market; but New York was not a great spot market nor was it bound by long years of custom. The importance of Liverpool consisted in the size of its spot market; its outlook was conservative and innovations were accepted with reluctance. The Liverpool Cotton Brokers' Association had managed without rules or committee from 1841 until 1863, but the confusion of the war years forced the Association to prescribe for itself a constitution and a gradually increasing number of rules and bye-laws. The rules of 1863 provided only for the election of officers and the holding of meetings. Not until the publication of the rules and bye-laws

¹ M. Williams, *Seven Years' History of the Cotton Trade of Europe* (Liverpool, 1867), p. 18.

in 1869 was the body of regulations relating to cotton "to arrive" collectively issued.¹ These rules provided for the proper delivery of the cotton, for procedure in case of loss or damage, for payment, for arbitration in case of dispute, and for appeal. It is significant that account is taken of dealings in the actual shipment of cotton alone; in evidence whereof the following quotation is important :

"In all cases when the terms are by ship or ships the marks of the Cotton must be declared to the buying Broker (unless specified to the contrary) within the following times next after the date of shipment named in the contract; viz. :

If from an East Indian port, within six weeks.

If from a North or South American port, within four weeks.

If from a Mediterranean or European port, within three weeks. . . ."

The edition of the rules and bye-laws of 1871 repeats for the most part those of 1869. The most noticeable amendment relates to the rule just cited, which appears in this form :

"In cases when Cotton shall be tendered under a contract for delivery on or before a given date, the seller must at the time of the tender be able to give the buyer immediate delivery of the Cotton. Whenever Cotton is sold per ship or ships, or for shipment before a given date, the name of the ship or ships, and the marks of the Cotton, if not previously declared, shall be given in writing by the selling to the buying Broker before noon of the day but one after a written application shall have been made to him by the buying Broker after the expiration of the following periods . . .

[as in 1869]

. . . after the *month* named in the contract, or if more than one month is named, then after the *actual month of shipment*; and whenever a ship's name is given on the contract the marks of the Cotton, if not previously declared, shall be in like manner, and upon similar application, be given after the expiration of the above stated periods from the date of *the contract*."

Plainly there were various forms of contract in use by 1871

¹ *Constitution, Laws and Usages of the Liverpool Cotton Brokers' Association*, 1869.

even under the official designation, which still persisted, of "cotton to arrive." There were specific contracts offering cotton by definite sailings. There were also general contracts providing for shipment in one of two named months.¹ A necessary correlative of the general contract was the basis clause; "basis middling," or "basis middling, nothing below low middling," appears with frequency in arrival quotations from 1869. Nor was this general contract merely a development of the older practice of selling for future months. It was needed for the covering of ordinary transactions, and its elastic nature was well adapted to that purpose. Merchants and spinners could buy and sell the general contract as they thought fit, replacing it later when it had fulfilled its object by the particular grade of cotton required. In other words, the general contract was used for "hedging," and it is necessary to turn back to discover how the procedure had been evolved.

The interest of outside speculators in cotton to arrive had revived after the war. Their eagerness to buy for a rise in price made them even willing enough to offer a premium to secure sufficiently distant delivery. Brokers would therefore sell these promises of delivery, trusting that an actual tender would not be required, or that, at the worst, they could buy in the cotton at lower prices before the time for delivery.² It was but a short step further to make the practice entirely safe by selling deliveries and buying cotton against them in America on c.i.f. contracts, so that in such a case the broker gained a profit "all the time his drafts were maturing and his cotton sailing . . . from the simple reason that as the distant months approached the premiums disappeared, and he was able to hold his cotton so much longer for a full price, and finally declare it on his original sale in case of need."³ This was taking place in all probability between 1868 and 1869. It was not long before it was realised that the spinner could protect himself in this way, equally with the importer; that he could safeguard himself by

¹ The following is a typical market report of the time: "The market continues dull and irregular at a general decline of $\frac{1}{4}$ d. per lb. from last week's quotations. To arrive: American, basis of middling, from any port, October–November shipment, $9\frac{1}{4}$ d.; Charleston, ship named, not below good ordinary, $9\frac{1}{2}$ d.; New Orleans, June–July shipment, $10\frac{1}{2}$ d. $10\frac{1}{4}$ d.; ship named, not below good ordinary, steamer, via New York, $9\frac{1}{2}$ d.; Dhollerah, fair new merchants, Cape or Canal, May–June shipment, $8\frac{1}{2}$ d.; Cape, May–June, $8\frac{1}{4}$ d.; May, ship named, $8\frac{3}{4}$ d. Estimated sales 10,000 bales, including 2000 on speculation and for export."—*Liverpool Mercury*, July 1, 1870.

² P. E. J. Hemelryk, *Forty Years' Reminiscences of the Cotton Market*, p. 16; Stolterfoht, Sons & Co.'s Circular, Jan. 22, 1869.

³ Hemelryk, p. 16.

buying contracts for future delivery just as the merchant could by selling them. Hence arose the use of the general contract for "hedging" purposes.

It was fortunate for the establishment of the whole system of arrivals and future contracts that the attitude of the law was one of benevolent neutrality. In *Bryan v. Lewis* in 1826 it had been declared that "If a man sells goods to be delivered on a future day, and neither has the goods at the time nor has entered into any previous contract to buy them, nor has any reasonable expectation of receiving them by consignment, but means to go into the market and buy the goods which he has contracted to deliver, he cannot maintain an action upon such a contract. Such a contract amounts on the part of the Vendor to a wager on the price of the commodity and is attended with the most disastrous consequences." This decision was overruled in 1839 in *Hibblewhite v. McMorine*, it being then held that Lord Tenterden's declaration had been "against law and against mercantile convenience." Left to itself, the commercial community followed the line of least resistance; like Topsy, the futures system just "grewed."

But its growth was not altogether untrammelled. Many merchants looked with disfavour upon "these objectionable gambling practices,"¹ and a concerted assault was launched by merchants and spinners in 1870.² The attack was directed against contracts for future delivery (contracts for cotton to arrive—properly so called—being specially excepted) on the ground that little or no capital was required and that people who had nothing to lose were induced to engage in them. The critics gained one point at least, namely, a common agreement to make mutual deposits.³ The agreement was voluntary in 1870, but was formally recognised by the Cotton Brokers' Association's rules of 1871, the insertion of a deposit clause on the face of the contract being then required. Subsequent growth was not eventful. Even the manufacturers had from time to time entered into engagements for the future delivery of their goods,⁴ and they would be the readier on that account to appreciate the possibility of safeguarding the price of their raw material.

It is to be regretted that the statistics given in the Liverpool market reports for the period do not permit of any estimate

¹ Stolterfoht, Sons & Co.'s Circular, Jan. 22, 1869.

² *Liverpool Mercury*, July 14, 1870.

³ Stolterfoht, Sons & Co.'s Circular, Sept. 23, 1870.

⁴ Williams, *op. cit.*, p. 33; *Economist*, March 13, 1869.

being made of the increase in future trading. Until after 1870 the custom still obtained of distinguishing only between sales "on speculation," "for export" and "to the trade." At New York, however, market reports supplied some account of the business in futures from 1868. The subsequent growth was remarkable, especially so after September 1870, when the New York Exchange was organised for future trading.¹

MONTHLY SALES FOR FUTURE DELIVERY, NEW YORK ²

The rapidity of development at New York is evidenced by the appearance in a broker's circular of 1870 of a full explanation of the method of working and of the advantages of "puts" and "calls" and of "futures." "By the term 'futures' is meant cotton sales and purchases for future delivery, which are daily made here by parties of the highest respectability whose contracts are made valid by the deposit of cash in bank as margin, which is held in trust until the contract is made. . . . The system of dealing in 'futures' is new to cotton operators and has been denounced by superficial observers only because it is new. We are inclined to believe that it will prove very beneficial to the cotton planter, the spinner, the factor and the general operator. By it the planter can sell his crop, before he puts the seed in the ground, at a price which may be remunerative, and thus be relieved of that terrible uncertainty for his hard-earned products, which uncertainty in price really makes cotton-planting one of the most hazardous speculations of the times. The spinner may purchase his supply of the raw material

¹ Part of the expansion may be accounted for, of course, by the fuller reporting of sales after that date.

² The figures for 1869 are collected from the weekly reports on the New York market issued by the *Economist*, and are incomplete for five weeks of the year. Those for 1870 and 1871 are taken from W. B. Dana, *Cotton from Seed to Loom*, New York, 1878, p. 193.

	1869.	1870.	1871.
Jan.	8,700	50,167	219,375
Feb.	3,150	66,608	241,450
March	8,600	98,342	447,700
April	1,500	39,722	153,690
May	1,450	70,175	350,183
June	5,850	67,233	351,450
July	16,590	51,401	273,000
Aug.	20,500	48,883	327,600
Sept.	24,581	89,883	350,750
Oct.	24,325	200,585	450,350
Nov.	36,283	189,205	343,314
Dec.	65,255	237,125	370,050

months ahead, and then make his contracts for goods at remunerative prices. The factor may be guaranteed so many bales for advances in the spring, and sell sufficient to be delivered the following season to cover said advances, if he thinks advisable to do so. . . ."

Such was the case put forward by Messrs. Ware, Murphy & Co. of New York in June 1870. The orthodox modern text-book says just as much—and just as little!

STANLEY DUMBELL

THE CHANGE IN FARM LABOURERS' DIET DURING TWO CENTURIES

THE general welfare of the labouring class is usually said to be superior to-day to what it was in earlier times. Among the considerations urged in support of this view are instanced the commodities imported from different parts of the world which have become everyday necessities in our civilisation. In common with most ready generalisations, the more closely this is examined the more unreal do the advantages claimed seem to be. It is true that the modern farm labourer has the doubtful advantage of using coffee or cocoa, that his ration of sugar has increased, and that he does eat a modicum of syrup, treacle or jam, but, as Mrs. Pember Reeves says of certain urban workers' dietary, "the tiny amounts of tea, dripping, butter, jam, sugar and greens may be regarded rather in the light of condiments than of food."¹ When an examination is made of the quantities of such foods actually consumed in a week by the standard man of economic theory,² the truth of her statement becomes obvious. A close examination of the table appended to this paper leads to the deduction that the only real advantage in the matter of food which the labourer of to-day has obtained over his ancestor of two hundred years ago is to be found in the item of potatoes. His ancestor's dietary has been improved upon by a quantity of this vegetable about equal to the quantity of bread normally eaten.

The earlier columns of the table are much less comprehensive than the later, but they do not include every article of food consumed by the labourers of the earlier period. The evidence I have been able to gather is conflicting and intermittent. Every investigator is aware of the contradictory opinions held by the pseudo-investigators of the eighteenth century, founded, as these opinions so often were, upon what the pamphleteers and writers

¹ *Round about a Pound a Week*, 1913, p. 103.

² Some uniformity in the size of agricultural labourers' families seems to exist. Taking a man, his wife and four children as the average family (see *Reasons for the Late Increase in the Poor Rates*, 1777, Cd. 2376, 1905, and Cmd. 76 1919), the number of standard units in each becomes 3·8, the figure used in this paper. A woman is taken as 0·8 man, and each child as 0·5, in accordance with the principles laid down in the Parliamentary Papers cited.

of the time wished to believe rather than upon the actual facts. Although a large amount of detail is to be found in the works cited, that detail is frequently of no serious use from a statistical point of view. It is of very little service for making a comparison with the accurate data provided by Mr. Wilson Fox. For instance, to learn that workhouse inmates at Bristol received three meals a day in 1700, and that the diet of girls was of a very mixed character,¹ so far as that was understood in those times, does not provide any definite information.

Again, it has only been possible to make an accurate statement in respect of some parts of the dietary allowed in the workhouses at St. Mary's Whitechapel in 1725. In addition to the items specified in the table, the paupers were fed with milk-porridge, peas-porridge, beef broth or burgow.² This is a City institution, but a similar dietary was common to all the workhouses which this anonymous writer discusses, and it is quite clear that a large and substantial proportion of the food was bread. Here it may be observed that the earliest rations are to be discovered in accounts of workhouses. There does not seem to be any budget of a working labourer, outside the workhouses, before the estimate dated 1737 in the table, and said by the writer of *Reasons for the Late Increase in the Poor Rates* (1777) to apply to a period forty years before his book was published. These estimates seem to be slightly generous. So far as they go, they are almost equal to the rations allowed to the Navy in 1765,³ of which Dr. Moffitt says: ⁴ "Physicians of the time were of the opinion that the allowance was all that any able working man could consume with health. But it is doubtful if any able working man in either north or south, unless a servant with some generous farmer, ever had the opportunity of making the experiment."

In the comparatively numerous writings of the eighteenth century which deal with the production of corn, it was usual to assume that the healthy labourer consumed a quarter of wheat per annum. Larger quantities of barley and rye were consumed by those who lived in the counties where these crops were grown for food, but so far as wheat was concerned, it was definitely understood that a quarter was required by each adult labourer.

¹ *An Account of the Proceedings of . . . Bristol . . . for the better Employing and Maintaining the Poor of that City*, John Cary, 1700, p. 12.

² *An Account of Several Workhouses for employing and Maintaining the Poor*, 1725.

³ *Museum Rusticum*, March 1765, cited by Dr. Moffitt.

⁴ *England on the Eve of the Industrial Revolution*, 1925, p. 123.

This quantity of wheat I have estimated to provide 8.6 lbs. of bread per week. I have arrived at this amount by assuming, in common with Maitland,¹ that 72 per cent. of flour was obtained in grinding wheat, and that the weight of flour is increased by one-third in the process of baking.² Judging by its consistency with such other figures as I have been able to discover, this result does not seem far out, although it yields less bread per head per week than is estimated to have been commonly consumed in the latter part of the century. On examination of the Labour Statistics³ it will be found that the *per capita* consumption of wheat in the United Kingdom for the years 1901 and 1911 was 5.6 and 5.7 bushels respectively, a lower general average than that of the particular class. Still, throughout the two centuries the labourer's consumption seems to have been definitely somewhere in the neighbourhood of 10 lbs. per week, so that the effect of civilisation does not seem to have increased that part of his food to any noticeable degree. About 1863 it is said to have been larger, but the amount of meat is smaller, a characteristic of a time of low wages, and a point to which I shall return.

Flesh food is best considered from the point of view of the total meat consumed. The various budgets and menus deal sometimes with beef, mutton, pork and bacon, but they do not always discriminate very clearly between the different classes of meat eaten. There is not very much variation in quantity. The pauper of 1725 who received 2 lbs. 4 ozs. per week was in an exceptional position, since most of the other eighteenth-century estimates point to a consumption of less than 2 lbs., and often indicate a week's supply at a quantity much nearer 1 lb. The only exception is the workhouse at Shrewsbury, where each adult inmate was allowed 2 lbs. 13 ozs. This supports my belief that the occupants of the houses of industry at the end of the eighteenth century, if not at the beginning, were in better circumstances than their brothers who did their utmost to keep outside these pleasant institutions.

In the early years of the twentieth century the average consumption of the standard man seems to have been about 1.9 lbs., which fell to 1.7 lbs. in 1912. It had declined to 1.1 lbs. in 1918, no doubt in some measure because of the food rationing regulations of the war period.

¹ *Domesday Book and Beyond*, 1897.

² Cmd. 76 (1919), Agricultural Wages Board Report . . . Cost of Living of Rural Workers.

³ Abstract of Labour Statistics, 1915 (Cd. 7733).

Eighteenth-century workhouse inmates received a ration of cheese. This was often very small; and the average family of an agricultural labourer, his wife and four small children, whose budgets for 1737 and 1777 are compared, used cheese as an alternative to butter,¹ while Davies states definitely that he was informed that "poor people reckon cheese the dearest article they can use."² On examination of the later statistics we find that .4 of a lb. was consumed in 1863, and that this quantity steadily declined until 1918. In the later dietaries small quantities of oatmeal and rice, lard, margarine or dripping, of syrup, treacle or jam and other little extras can be found.

In 1700 and 1725 we find that the workhouses provided broth, peas-porridge, milk-porridge, cabbage, carrots, turnips, etc., and that it was a commonplace of their dietaries to provide vegetables as the season affords; but these small luxuries are comparable to the equally small luxuries of the modern dietary.

There is one item that is not discernible in any quantity in the eighteenth-century dietaries, and that item is the one upon the acquisition of which the modern labourer can compliment himself, if he finds any satisfaction in doing so. It is the potato. So early as 1863 we find the standard man consuming 7 lbs. of potatoes per week. In 1902 and 1912 the consumption had slightly decreased, but, with the food restrictions of the war, and the difficult situation in which most people found themselves, the consumption of potatoes had risen to nearly 8 lbs. per week in 1918. This is the accession of luxury made by the average farm labourer in the two hundred years, during which the most marked progress has been made, and all the facilities for rapid transport have been acquired. An interesting comparison between the situation of the farm labourer and that of the average man can be made by taking the *per capita* consumption of meat for the years 1901 and 1911 from the Labour Statistics.³ In the two selected years this was respectively 136.2 lbs. and 127.2 lbs., an average of 2.6 lbs. and 2.5 lbs. per week, rather more than $\frac{1}{2}$ lb. greater than the average consumption of the labourer.

There is another point worthy of comment, although perhaps not very important. In the early part of the eighteenth century a very light beer was commonly drunk. We find this distributed in the poor-houses at the rate of one pint per meal or one quart

¹ *Reasons for the Late Increase in the Poor Rates, 1777.*

² *The Case of the Labourers in Husbandry*, David Davies, 1795.

³ Abstract of Labour Statistics, 1915 (Cd. 7733).

per day, and we find it figuring in the dietary of the labourers of the north as well as in the south, although the former were in the habit of using milk for their porridge. This light beer had disappeared from the budget of the labourer by the end of the eighteenth century, and in modern times we find it substituted by a smaller amount of milk, presumably used with the almost minute quantities of tea or cocoa.

The advantages of civilisation seem to have passed over the head of the agricultural labourer. It is perhaps not to be expected that a greater bulk of cereal foods would be consumed by the modern labourer than was eaten by his ancestors. Men's stomachs are no larger to-day than they were some 225 years ago, but it might reasonably have been anticipated that the farm labourer's diet of to-day would prove more varied and appetising than it was so long ago.

It may be imagined that besides buying the best and most satisfying food his spare income will afford, the farm labourer eats so large a proportion of bread because he finds it the most suitable diet for his arduous work. An investigation into the "Consumption and Cost of Food in Workmen's Families" was carried out by the Board of Trade in 1903¹ and 1904,² and the evidence then adduced does not confirm the idea of choice on the part of the farm labourer. This evidence is composed of averages obtained from families on different levels of income, taken at each 5s. rise between under 25s. and 40s. and upwards a week. The Memoranda show that the expenditure on bread "does not increase with the size of the income,"³ and that in the case of incomes below 25s. the expenditure on bread and flour forms about 21 per cent. of the total spent on food; for incomes between 35s. and 40s. the proportion is 15 per cent.⁴ The expenditure on meat follows the directly opposite course. The earlier Memoranda, the reliability of which is impugned by the undue proportion of returns obtained from London, says: "The figures show that as the income increases, the expenditure on meat also increases . . ."⁵ while the later, which takes its results from a much larger number of more uniformly distributed returns, confirms the tendency in the words: "The expenditure on meat, bacon and fish is seen from the table to vary fairly in proportion to the income, in this respect contrasting with the

¹ British and Foreign Trade: Memoranda, etc. (Cd. 1761), 1903.

² British and Foreign Trade: Second Series of Memoranda, etc. (Cd. 2337), 1904.

³ Cd. 1761, p. 213.

⁴ Cd. 2337, p. 6.

⁵ Cd. 1761, p. 213.

Farm Labourer's Weekly Diaries: 1725-1918.

Item.	1737. ²		1755. ³	1765. ⁴	1777.		1784. ⁵	1785. ⁶	1795. ⁷	1797. ⁸	1803.		1902.		1912.		1918.
	Family.	lbs.			Family. ²	Standard Unit.					Family. ¹⁰	Standard Unit.	Family. ¹¹	Standard Unit.	Family. ¹¹	Standard Unit.	
Beef or Mutton	lbs.	10	lbs.	lbs.	lbs.	10	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
Bacon											4-55	1-2					
Total Meat	2-25	10	6	10	1-2	10	1-3	1-75	1	2-8	1-8 (a)	4-55	1-2	1-9	6-53	1-7	4-3
Bread	7	43	7	43		43			1-4 gals.	10-5	10-56 (b)	55-75	14-7	10-2	39-61	10-4	39-78
Flour																	
Oatmeal and Rice																	
Potatoes			2 pts.														
Cheese	0-875	4 or 2	lb.	4 or 2	0-75	4 or 2											
Butter			0-375	0-22	0-22	2				0-375	1-56	0-4	1-2	0-3	1-08	0-3	0-45
Margarine and Dripping.														0-5	2-07	0-5	1-65
Tea, Coffee or Cocoa																	
Sugar																	
Milk: New	pts.	24				pts.											
" Skimmed						18											
" Beer	14	24				24											

¹ Account of Several Workhouses for Employing and Maintaining the Poor, 1725.

² Reasons for the Late Increase in the Poor Rates, 1777. This is the diary of a man, wife and four small children, showing the financial position of the family at the two periods.

³ Bucknridge: "Concerning the Number of Poor in England," *Phil. Trans.*, Vol. 49, i, p. 268 ff. See also *The Present State of Great Britain and North America*, 1768, p. 34.

⁴ *The Political State of Great Britain*, John Campbell, 1774, p. 71; *Inefficiency of the Causes to which the Increase of the Poor . . . ascribed*, Howlett, 1788, p. 64; *Observations on the Corn Bill*, John, Lord Shelburne, 1791, p. 16.

⁵ *Museum Rusticum*, March, 1795. Weekly allowance to every man in the Navy.

⁶ *Reports of the Special Provision Committee appointed*, Norwich, Edward Rigby, 1788, p. 26.

⁷ *Political Inquiry into the Consequences of excluding Waste Lands*, Society of Farmers, 1785. An estimate incidental to a statement of the supposed inhabitants of the country.

⁸ *The Case of the Labourers in Husbandry*, David Davies, 1796, p. 8 ff. Flour reduced to consumption per standard unit: it has been calculated as an average of all the relative figures Davies gives.

⁹ *Some Account of the Streetury House of Industry*, I. Wood, 4th ed., 1795, p. 102.

¹⁰ *The State of the Poor*, Sir F. N. Eden, 1797. Wherever possible, i.e. a and b, the numbers have been reduced to standard men and the consumption averaged accordingly. a = av. of 36-2 standard unit, b = av. of 33-4.

¹¹ Dr. R. Smith, Report on the Food of the Poor Labouring Classes, etc., App. No. 6 to Sixth Report of the Medical Officer of the Privy Council, 1863, p. 262, cited by Fox, Agricultural Wages, *General Royal Statistical Society*, 1903, Vol. LXVI, p. 296. Without consideration of number in each family—370 families.

¹² Cmd. 76 (1919). Report of the Committee appointed . . . "to inquire into the Financial Results of the Occupation of Land."

almost stationary expenditure on bread.”¹ The table which follows that remark shows that the proportion varies between 18 and 16·4 per cent., the lower figure applying to the higher income.

It thus becomes abundantly clear that if the farm labourer's income were of any sizable value greater now than heretofore, he would add to his dietary in the manner of the more highly paid urban workers.

G. E. FUSSELL.

¹ Cd. 2337, p. 6.

NOTE ON THE LABOUR EXCHANGE IDEA IN THE SEVENTEENTH CENTURY

SIR W. BEVERIDGE, in his article in *THE ECONOMIC JOURNAL* for September 1914, refers to a suggestion for a Labour Exchange in the seventeenth century. A certain H. Robinson, in his *Office of Addresses and Encounters* published in 1650, had advocated the idea; the office was, however, to include large numbers of other functions, such as buying and selling of stock, acting as a general commercial rendezvous and an "at home" for all manner of parties. In a subsequent correction Sir W. Beveridge pointed out that this idea was almost certainly borrowed from France, where an almost similar office had not only been advocated but operated. The Labour Exchange idea, therefore, originated from France, not from Germany; presumably not from England.

It is interesting to note in this connection that in 1660—ten years after—Labour Exchanges were advocated as a method of poor relief in England; the offices were not to include extraneous functions, but were to be devoted exclusively to the duties generally associated with the modern Labour Exchange. The suggestion was an English idea, shows no effort of imitation from abroad, and was indeed based on English experience. The insight with which Sir W. Beveridge is not disposed to credit Robinson into some of the fundamental ideas of the Minority Report of the Poor Law, 1909, is indisputably revealed in the Labour Exchange proposal of 1660. I refer to T. Lawson's *An Appeal to the Parliament concerning the Poor that there may not be a Beggar in England*, 1660.

The proposal arose in the course of an effort to grapple with the whole problem of poverty. Lawson was proposing a "Plat-forme" for State policy. He therefore lays down the need of State action as compared with private charity in dealing with the problem, and this gives him an important place in the history of social reform. "If there be not," he urges, "an absolute Necessity laid on them (whom it doth concern) to execute their office, this work may fail, or come to little or nothing." The rights of the poor were to be legally sanctioned. Cases of neglect were to be notified to the legal authorities—there being free access; the executors of the law were to be supervised and punished if they

were guilty of neglect of the poor, for was not law for the "disobedient and lawless?" Here was a new twist on the meaning of an old phrase. As a preliminary to any system of poor relief, he saw the necessity of some system of statistics. It was necessary "to take Notice how many Old, Impotent and young children be in the Parish"; further, it would be useful to "Order things to the best advantage in Cities, Towns and Villages . . . to take a List, or the just Numbers in great Cities, Outstreets and Alleys, Tenants, In-Tenants and Inmates, where maybe many perish, many idle are to be found and settled in Order."

Having made a difference between the old, impotent and young, and the able-bodied, he believes that the latter should be put to work, the others maintained. He suggests, without much originality,¹ that every parish should be responsible for, and should financially assist undertakers, employing the poor. Lawson realises, however, in the manner of the Minority Report, the unequal incidence of the burdens on each district. Thus he makes a definite suggestion: "In Parishes," he remarks, "where the poor are much increased and have no trade, or where some great trade is wholly decayed, there some other is to be sought for with discretion; in Parishes where there are no poor, their account is soon given and they fit to help others; some near London said they had not a beggar dwelling in their Parish and yet have had thirty travelling beggars in one week."

He then suggests to Parliament, in the course of his "Platforme," the adoption of a "Poor Man's Office," presumably one for each parish. The duties are plainly stated: "First, where Handycraftsmen and Labourers that want work and such as want workmen, may enquire. Secondly, where Boys that would or *are fit* to go as Apprentices, may enquire of masters; and such as want servants in city or country, or when they have spoken to may enquire. Thirdly, where Maids that would or *are fit* to go as Apprentices or covenant—servants—or some that want such, may enquire." With reference to the latter, though Lawson may have referred to the three classes, he urges that "None be put to service until they be *first taught to knit, spin, sew, learn some trade or way of livelihood, who else are neither fit for service nor can in after-times do anything for themselves*." Lawson anticipates here the necessity emphasised at the present time in the Minority Report and the Maclean Report—of constructive education during the period of unemployment.

¹ See Parish proposals of Locke, Haines and Hale in Eden, *State of the Poor*, 1797.

A fourth function of the office was to enable "all poor people that are in distress or danger of perishing, to make their conditions known, that means may be used to supply their wants."¹ It was further urged that the poor should not be denied their former liberty even though they were to be assisted.²

Lawson suggests that his ideas had developed as from one "who wisheth the good of all, who, having been many years exercised among the Poor, and much desired their good, through long experiences had seen the ground of their misery, the easiness of the remedy, and the benefit." It is interesting to note in this connection that Lawson, who was a Quaker, was the "right and trustworthy" friend, and indeed executed the will of the Quaker ancestor of John Fielden, the Radical Member for Oldham, the great Quaker Factory Reform pioneer of the nineteenth century. Lawson was a zealous Quaker, and had written books to defend his Quakerism. The Quakers at this time were working out a very successful system of poor relief, and the individual meetings made it their business to provide for their own poor. It was here Lawson learnt his experience. The Quakers were generous in placing the experience of their community at the disposal of society. All the chief Quakers of the seventeenth century addressed many of their tracts to Parliament, King and Magistrates, and they had a considerable understanding of the idea of social responsibility. W. Penn, for example, urged the State to convert its tithes and glebe lands into hospitals for blind and lame.³ George Fox would even transform Whitehall for the purpose of poor relief.⁴ The persecution which the Quakers suffered on a national scale encouraged them to the conception of a national outlook. Thus in preparing minute details of their sufferings, for example, in refusing to pay tithes, for the examination of the Government, the Quakers early learnt the value of statistics; and this became of use in the relief which was carried out by their *Meeting for Sufferings*. This national outlook and emphasis on a businesslike record is well reflected in T. Lawson's suggestions for poor relief.

Lawson's division of the poor into the old, impotent and young, and the able-bodied, was well accepted among the Quakers. Fox referred to an early Business Meeting for the

¹ Compare Minority Report, 1909—Registrar of Public Assistance, p. 706; and p. 715.

² Compare Minority Report, 1909, p. 708.

³ W. Penn, *Commentary upon the Present Condition of the Kingdom*, 1677.

⁴ G. Fox, *To the Parliament of the Commonwealth*, 1659.

relief of poor among Friends as early as 1650.¹ In 1656 Fox emphasised that each Meeting should relieve its own poor, widows and orphans.² A London Meeting at the Bull and Mouth in 1662 considered it an appropriate function for women to "visit the sick and search out the necessities of the poor, weak, widows, aged, etc."³ Fox suggested in 1658 that merchants should "lay a little aside and have a place provided that all the poor blind, lame cripples, shall be put into and nurses set over them, and looked to and cherished and see they do not want; those that could work, to work."⁴ Later, in 1675, Fox had urged the establishment of lunatic asylums, "where they may put any person that may be distempered in mind so that they may not be put among ye world's people and about ye streets."⁵ These ideas found the natural culmination in John Bellers,⁶ who advocated a Ministry of Health; he noted the connection between poverty and disease, and demanded the establishment of hospitals as a State enterprise with a subsidy for medical research. For the able-bodied, however, the Quakers sought to find employment. Owing to their conscientious scruple against paying for their maintenance in prison, the Quakers were busy in the English prisons supporting themselves, and the principle of self-support was extended to their whole system of poor relief. Raw material was bought and the poor were given the opportunity both to spin and weave; the profits, if any, went to the Meeting.

It was found that this system of poor relief entailed unequal burdens on the Meetings; in a similar way T. Lawson anticipated a similar inequality between the parishes. It was remarked in 1659 that "collections be made in the several counties . . . and if the money collected in any particular county is not sufficient to supply the necessities of Friends in the same county . . . then the other of the said counties who have any collection in the general stock, do contribute towards the necessities of that county."⁷ This suggestion was confirmed in Anthony Pearson's letter to the Skipton Meeting. "Where Friends," it is asserted, "of one Meeting are overburthened and under a greater charge than they can bear . . . the Monthly Meetings should come to

¹ J. Barclay, *Select Series Biographical and Narrative*, Vol. VII., *Letters of Early Friends*, 1841, pp. 277-83.

² *Ibid.*

³ *Ibid.* p. 308.

⁴ Fox, *Warning to All Merchants*, 1655.

⁵ Instructions to Six Weeks' Meetings preserved at Radcliffe Monthly Meeting.

⁶ John Bellers, *Essay towards the Improvement of Physic*, 1714.

⁷ J. Barclay, *Select Series Biographical and Narrative*, Vol. VII., *Letters of Early Friends*, 1841, p. 286.

their assistance. Where the Monthly Meeting has charges more than it can bear, then the General Meeting of the North was to take care to contribute . . . that we may bear one another's burdens, and walk in love as becomes brethren." ¹

Thus the Quaker organisation as a whole made itself responsible for finding employment for its members. The able-bodied poor were either given work or work was made for them. The wealthier members of the Society, no doubt, who were looking for servants and workers, were prevailed upon by the Society to take into employment those Friends who needed work. The corporate feeling was so strong that the Meeting became a clearing house for all kinds of information. ² The responsibility was felt to be imperative, especially when many Quakers were thrown out of work owing to their adhesion to their faith; whilst others, for example many in the army, found necessity to leave their employment owing to conscientious scruples. At a Meeting of Friends of four counties in 1659, it was decided that "tender care be taken of all such children, wives, servants, soldiers or others who are turned out of their places or families for truth's sake." ³ Pearson added to this by indicating the need to "provide employment for such as want work or cannot follow their former calling by reason of the evil therein." ⁴ The Quaker Meeting was, in fact, carrying on the functions of a Labour Exchange. It quickly found, as a result, the need of an industrial education among the poor. Institutions such as Clerkenwell were established, which combined an industrial education with poor relief. John Bellers, in his *College of Industry*, laid great stress upon it, later on.

Thus in the seventeenth century a Labour Exchange was suggested which had been inspired by a general effort towards poor relief; it was not an imitation from abroad, but synthesised the experience of an essentially English movement. Lawson's Office remains the first exclusive Labour Exchange that has ever been suggested as a matter for State enforcement; and for the rest, it is of interest to know that the ideas underlying the Poor Law Minority Report of 1909 were discovered in *England* in the seventeenth century.

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¹ J. Barclay, Select Series Biographical and Narrative, Vol. VII., *Letters of Early Friends*, 1841, p. 290.

² As a survey of the Swarthmore MSS. (at Friends' House, Euston) will show.

³ *Letters of Early Friends*, p. 284.

⁴ *Ibid.*, p. 290.